



REPORT

TETON COUNTY LANDFILL WASTE RELOCATION AND EARTHWORKS PROJECT PROJECT MANUAL

Teton County Integrated Solid Waste and Recycling
Jackson, Wyoming

Submitted to: Teton County
Integrated Solid Waste and Recycling
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March 2016

123-81604A



TETON COUNTY INTEGRATED SOLID WASTE AND RECYCLING
JACKSON, WYOMING

TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT

SECTION 00 01 10

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BIDDING REQUIREMENTS

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PART 1 – GENERAL

1.1 DESCRIPTION

- A. This Section lists the Drawings for the Teton County Landfill Waste Relocation and Earthworks Project pursuant to Article 9 of EJCDC C-520 – Agreement.
- B. Related Sections:
 - 1. EJCDC C-700 – General Conditions

1.2 CONTRACT DRAWINGS

- A. The Contract Drawings are as follows:
 - 1. Drawing 1 – Cover Sheet
 - 2. Drawing 2 – Overall Site Plan
 - 3. Drawing 3 – Waste Excavation Plan
 - 4. Drawing 4 – Waste Relocation Plan
 - 5. Drawing 5 – Final Grading Plan
 - 6. Drawing 6 – Details (1 of 2)
 - 7. Drawing 7 – Details (2 of 2)

1.3 COPIES OF DRAWINGS

- A. Bidding Documents may be obtained from the Teton County Engineering website at <http://www.tetonwyo.org/engineer/topics/find/253146>
- B. Printed copies of Bidding Documents are available for purchase from Stinky Prints, Inc. (www.stinkyprints.com), 260 E. Broadway, Jackson, WY 83001, phone 307-690-8892
- C. One set of full-size the Contract Drawings will be furnished to CONTRACTOR for construction purposes. The OWNER will also provide CAD files and/or TIN surfaces from the Contract Drawings, if requested.

1.4 PROJECT CONDITIONS

- A. CONTRACTOR shall inform OWNER of any discrepancies, errors, or omissions discovered or in the Bidding Documents.
- B. Where there are differences, as determined by the OWNER, between details and dimensions shown on the Drawings and details and dimensions of existing features at the site, CONTRACTOR shall use details and dimensions of existing features at the site.

1.5 SUBSURFACE DATA

- A. Subsurface data have been obtained to support the design and permitting of this project. See EJCDC C-700 – General Conditions for a list of reports of explorations and tests of subsurface conditions at the site. The reports are available electronically for examination by prospective bidders, upon request.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

**TETON COUNTY INTEGRATED SOLID WASTE AND RECYCLING
JACKSON, WYOMING**

**TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT**

ADVERTISEMENT FOR BIDS

Sealed Bids for the **Teton County Landfill Waste Relocation and Earthworks Project** will be received by Teton County, WY (Owner) at the **Teton County Engineering Office, 320 S. King St., Jackson, WY, 83001**, (commonly known as the Old Library), **until 11:00 A.M. local time on Thursday, April 14, 2016**, at which time the Bids received will be publicly opened and read. The Project primarily consists of the excavation and relocation of historical buried municipal solid waste (MSW) from the Teton County Transfer Station site to the old Teton County Landfill and the site preparation of the Transfer Station site.

Bids will be received for a single prime Contract. Bids shall be on a unit price basis on the Bid Form included in the Bidding Documents.

The Issuing Office for the Bidding Documents is: Teton County Engineering Office, 320 S. King St., Jackson, WY, 83001, Jeff Rusch, Senior Project Engineer, Golder Associates Inc., phone: 720-962-3435, and email: jrusch@golder.com.

Bidding Documents may be obtained online from the Teton County Engineering website at <http://www.tetonwyo.org/engin/topics/find/253146>. Printed copies are available for purchase from Stinky Prints, Inc. (www.stinkyprints.com), 260 E. Broadway, Jackson, WY 83001, phone: 307-690-8892. Prospective Bidders may also examine the Bidding Documents at the Issuing Office on Mondays through Fridays between the hours of 9:00 A.M. and 3:00 P.M.

No bids will be opened unless sealed and filed with the Teton County Engineering Office and accompanied by a bid bond payable to the Owner for 5% of the bid amount (to be forfeited as liquidated damages in the event that the bidder fails to enter promptly into a written agreement contract and furnish the required documents).

The successful bidder shall provide a 100% Performance and Payment bond as security for the faithful performance and payment of all of Contractor's obligations under the Contract.

Pursuant to Wyoming Statutes (W.S.) 16-6-102, a five percent (5%) bid preference will apply to bids from Wyoming Resident Contractors. All bidders shall comply with the "Preference for State Laborers / Wyoming Preference Act of 1971" (W.S. 16-6-203).

Pursuant to W.S. 16-6-106, preference will be given to materials, supplies, agricultural products, equipment, machinery and provisions produced, manufactured or grown in Wyoming, or supplied by a resident of the state, quality being equal to articles offered by the competitor outside of the state.

A **MANDATORY pre-bid conference** will be held at 2:00 P.M. local time on Thursday, March 31, 2016 at the Teton County Engineering Office, 320 S. King St., Jackson, WY, 83001. **A site visit will follow the pre-bid conference.** All prospective bidders who wish to submit a proposal must attend. Any prospective bidder who arrives later than 2:00 P.M. will be disqualified from bidding.

The Owner reserves the right to reject any or all proposals and to waive informalities and irregularities in proposals.

Publish: Jackson Hole News and Guide (March 16, 23, and 30, 2016)
Idaho Falls Post Register (March 13 and 20, 2016)
Salt Lake City Tribune (March 20 and 27, 2016)

+ + END OF ADVERTISEMENT FOR BIDS + +

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

**SUGGESTED INSTRUCTIONS TO BIDDERS
FOR CONSTRUCTION CONTRACTS
TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT**

Prepared by



Issued and Published Jointly by



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INSTRUCTIONS TO BIDDERS

**TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT**

MARCH 14, 2016

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ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions ~~and Supplementary Conditions~~. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within **FIVE [5]** days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:

A. Evidence of Bidder's authority to do business in the state where the Project is located.

B. Bidder's state or other contractor license number, if applicable.

C. Subcontractor and Supplier qualification information; coordinate with provisions of Article 12 of these Instructions, "Subcontractors, Suppliers, and Others."

D. Other ~~required~~ information requested by Owner regarding qualifications

3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or

storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 Existing Site Conditions

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The ~~Supplementary~~ General Conditions identify:
 - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
2. Owner will make copies of the reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the ~~Supplementary~~ General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings not part of the Contract Documents.

~~3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.~~

~~4. Geotechnical Baseline Report: The Bidding Documents contain a Geotechnical Baseline Report (GBR). The GBR describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations ("Baseline Conditions"). The GBR is a Contract Document.~~

~~The Baseline Conditions in the GBR are intended to reduce uncertainty and the degree of contingency in submitted Bids. However, Bidders cannot rely solely on the Baseline Conditions. Bids should be based on a comprehensive approach that includes an independent review and analysis of the GBR, all other Contract Documents, Technical Data, other available information, and observable surface conditions. Not all potential subsurface conditions are baselined.~~

~~Nothing in the GBR is intended to relieve Bidders of the responsibility to make their own determinations regarding construction costs, bidding strategies, and Bid prices, nor of the responsibility to select and be responsible for the means, methods, techniques, sequences, and procedures of construction, and for safety precautions and programs incident thereto.~~

- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

A. An opportunity for a site visit will follow the mandatory pre-bid conference as stated in the Advertisement for Bids.

A.B. Bidder shall conduct ~~the required~~additional Site visits during normal working hours, and shall not disturb any ongoing operations at the Site. Site visits are to be conducted by appointment only. To make an appointment contact Kent Jaspersen, Program Manager, Teton County Integrated Solid Waste and Recycling, phone 307-733-7678, email kjaspersen@tetonwyo.org.

B.C. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.

C.D. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.

D.E. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.

E.F. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary General Conditions.

~~4.05 *Other Work at the Site*~~

~~A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to~~

~~examine such contracts (other than portions thereof related to price and other confidential matters), if any.~~

ARTICLE 5 – BIDDER’S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary General Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary General Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs;
- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.01 A **MANDATORY** pre-bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are **required encouraged** to attend and participate in the conference. **Failure to attend the pre-Bid conference will preclude the Bidder from bidding.** Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective. **An opportunity for site visit will follow the pre-bid conference.**

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

ARTICLE 8 – BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of **FIVE [5]** percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

9.01 The number of days within which, or the dates by which, Milestones are to be achieved and the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 – LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

- 11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or “or-equal” items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or “or-equal” item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.
- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- 12.03 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for the Work. If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- 12.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

ARTICLE 13 – PREPARATION OF BID

- 13.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form shall be completed by typewriter or in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown. The corporate seal shall be affixed and attested by the corporate secretary or an assistant corporate secretary.
- 13.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 13.04 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.05 A Bid by an individual shall show the Bidder’s name and official address.
- 13.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.07 All names shall be printed in ink below the signatures.
- 13.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.10 The Bid shall contain evidence of Bidder’s authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder’s state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 – BASIS OF BID

- 14.01 *Base Bid ~~with Alternates~~*
- A. Bidders shall submit a Bid on a lump sum and unit price basis for the base Bid ~~and include a separate price for each alternate described in the Bidding Documents and as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate.~~
 - ~~B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form.~~

~~C.~~ Bidders shall submit a Bid on a lump sum basis for each item of Work listed in the lump sum unit price section of the Bid Form.

~~D.B.~~ Bidders shall submit a Bid on a lump sum and unit price basis for each item of Work listed in ~~the unit price section of~~ the Bid Form.

~~E.C.~~ The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all lump sum and unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.

~~F.D.~~ Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

14.02 Force Account

A. Bidders shall include the Force Account lump sum listed in the Bid Form in their base Bid.

~~14.02—Allowances~~

~~For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.~~

ARTICLE 15 – SUBMITTAL OF BID

~~15.01—With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.~~

~~15.02~~15.01 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title ~~(and, if applicable, the designated portion of the Project for which the Bid is submitted)~~, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. ALL BIDS must be delivered by hand if a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." ~~A mailed Bid~~ shall be ~~delivered~~addressed to Teton County Engineering. The address for hand delivery or other delivery system is 320 South King Street, Jackson, WY, 83002.

~~15.03~~15.02 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the

date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the total amounts of the base Bids ~~and major alternates, if any,~~ will be made available to Bidders after the opening of Bids.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- 19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- 19.03 Evaluation of Bids
- A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, ~~and such alternates,~~ unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
 - B. For the determination of the ~~apparent~~ Apparent low-Low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
 - ~~C. Bid prices will be compared after adjusting for differences in time of Substantial Completion (total number of calendar days to substantially complete the Work) designated by Bidders. The adjusting amount will be determined at the rate set forth in the Agreement for~~

~~liquidated damages for failing to achieve Substantial Completion, or such other amount that Owner has designated in the Bid Form.~~

~~D. The method for calculating the lowest bid for comparison will be the summation of the Bid price shown in the Bid Form plus the product of the Bidder specified time of Substantial Completion (in calendar days) times the rate for liquidated damages [or other Owner designated daily rate] (in dollars per day).~~

~~E. This procedure is only used to determine the lowest bid for comparison and contractor selection purposes. The Contract Price for compensation and payment purposes remains the Bid price shown in the Bid Form.~~

- 19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 20 – BONDS AND INSURANCE

- 20.01 Article 6 of the General Conditions, ~~as may be modified by the Supplementary Conditions,~~ sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 21 – SIGNING OF AGREEMENT

- 21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

BID FORM
FOR CONSTRUCTION CONTRACTS
TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT

Prepared by



Issued and Published Jointly by



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BID FORM

**TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT**

MARCH 14, 2016

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ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

TETON COUNTY, WYOMING
320 S. King St.
Jackson, WY, 83001

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied the Bidding Documents and is aware of all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the SupplementaryGeneral Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the SupplementaryGeneral Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following lump sums and unit price(s):

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization/Demobilization	LS	1		
2	Special and Hazardous Waste Storage and Handling Area	LS	1		
3	Existing Surface Water Inlet Connection	LS	1		
4	Force Account	LS	1	\$200,000	\$200,000
5	Strip Topsoil and Stockpile	CY	21,780		
6	Waste Excavation, Haul, Place, and Cover	-	-	-	-
6A	Up to 200,000 CY	CY	200,000		
6B	200,001 CY to 300,000 CY	CY	96,900		
6C	More than 300,001 CY	CY	0		
7	Clean Soil Excavation, Haul, Placement, and Compaction	-	-	-	-
7A	Up to 200,000 CY	CY	174,600		
7B	200,001 CY to 300,000 CY	CY	0		
7C	More than 300,001 CY	CY	0		
7X	Clean Soil Excavation, Stockpile, Backfill, and Compaction	CY	0		
8	Backfill with Existing Site Debris (Glass)	CY	2,500		
9	Clean Soil Borrow Excavation, Haul, Backfill, Compact, and Grade	CY	72,800		
10	WYDOT Class W Road Base	SY	20,750		
11	Finish Grading Stormwater Channels	LF	1,480		
12	Precast Surface Water Inlet Structure	ea	1		
13	Concrete Surface Water Channel	CY	90		

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
14	18-inch CMP Culvert Pipe	LF	280		
15	30-inch CMP Culvert Pipe	LF	500		
16	36-inch CMP Culvert Pipe	LF	330		
17	Riprap	ton	1,675		
18	Seed/Mat/Fertilize – Steep Slopes	ac	5		
19	Seed/Mulch/Fertilize – 4H:1V Slopes	ac	27		
Total of All Unit Price Bid Items				\$	

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor’s overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Total of Unit Price Bids = Total Bid Price \$ _____

Total Bid Price in words: _____

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete within 171 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 30 calendar days after the date when the Contract Times commence to run.

~~6.02 — Bidder accepts the provisions of the Agreement as to liquidated damages.~~

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. List of Proposed Subcontractors;
- C. List of Proposed Suppliers;
- D. Project Sequencing Narrative and/or Schedule;
- ~~C.~~

~~D.E.~~ Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;

~~E.F.~~ Contractor's Wyoming License No.: ;

~~F.G.~~ Certification of Non Collusion Bidding

~~G.H.~~ Certification of Non-Discrimination

~~H.I.~~ Certification of EEO Performance

~~I.J.~~ Addenda

~~J.K.~~ Proposal Execution Checklist

~~K.L.~~ Bid Bond Execution Checklist

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, ~~the General Conditions,~~ and the SupplementaryGeneral Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____

(where applicable)

CERTIFICATION OF SUSPENSION OR DEBARMENT

Or any person or persons associated therewith in the capacity of owner, partner, director or officer authorized to sign contracts:

- Is currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency?
- Has been suspended, debarred, voluntarily excluded, or ineligible by any federal agency within the past three years?
- Does have a proposed debarment pending?
- Has been indicted, convicted, or had a civil judgment rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years?
- Applicable: If answer is YES to any of the following four items above, insert Suspension of Debarment actions below:

Suspension or Debarment actions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any Suspension or Debarment noted, indicate below to whom it applies, initiating agency, and dates of action.

SUSPENSION OR DEBARMENT LISTING

APPLIES TO WHOM	INITIATING AGENCY	DATES OF ACTION
-----------------	-------------------	-----------------

The person or persons signing this Proposal do hereby certify, under penalty of perjury, that this CERTIFICATION OF SUSPENSION OR DEBARMENT is a true and accurate statement.

CERTIFICATION OF NON COLLUSION BIDDING

- 1) That by submission of this bid, each bidder and each person signing on behalf of any bidder, certifies as to their own organization, under penalty of perjury, that to the best of their knowledge and belief:
 - A) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement with any other bidder, or with any competitor for the purpose of restricting competition.
 - B) Unless required by law, the prices, which have been quoted in this bid, have not been knowingly disclosed and shall not be knowingly disclosed by the bidder, directly or indirectly, to any other bidder or competitor prior to opening of bids.
 - C) No attempt has been made or shall be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

- 2) A bid will not be considered for award, nor will any award be made where there has not been compliance with 1) A, B, and C above. If the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement, which sets forth in detail the reasons why the certification cannot be made. Where 1) A, B, and C above have not been complied with, the bid will not be considered for award, nor will any award be made unless Teton County, Wyoming determines that such disclosure was not made for the purpose of restricting competition.
The fact that a bidder has published price lists, rates, or tariffs covering items being procured; or has informed prospective customers of proposed or pending publication of new or revised price lists of such items; or has sold the same items to customers at the same prices being bid, does not constitute a disclosure within the meaning of 1) A above.

The bid made to Teton County, Wyoming shall be deemed to have been authorized by the Board of Directors of the bidder. Such authorization shall be deemed to include the signing and submission of bid, and the inclusion therein of the certificate as to non-collusion on the part of the corporation.

The signers of this proposal hereby tender to Teton County, Wyoming this sworn statement that the named Contractor has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action to restrain free competitive bidding in connection with this proposal.

CERTIFICATION OF NON-DISCRIMINATION

The bidder hereby certifies that all persons employed by their firm, their affiliates, subsidiaries, or holding companies are treated equally by their firm without regard to or because of race, religion, ancestry, national origin or sex as required by Federal and State anti-discrimination laws. The bidder further certifies and agrees that it will deal with Subcontractors, bidders, or vendors without regard to or because of race, religion, ancestry, national origin, or sex. Violation of this certification may constitute a material breach of contract upon which Teton County, Wyoming may determine to cancel, terminate, or suspend the contract as per the provisions of the State of Wyoming Executive Department Executive Order 1976-6.

CERTIFICATION OF PREVIOUS EEO PERFORMANCE

Certification with regard to the Performance of Previous Contracts or Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports.

- Does the Bidder hereby certify that they have participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246.
- Has the bidder filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements?

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by bidders and proposed Subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of \$10,000 or under are exempt).

Currently, Standard Form-100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such Contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

By signing this Proposal, the bidder signifies that he has complied with the provisions of "CERTIFICATION OF SUSPENSION OR DEBARMENT, CERTIFICATION OF NON-COLLUSIVE BIDDING, CERTIFICATION OF NON-DISCRIMINATION, AND CERTIFICATION OF PREVIOUS EEO PERFORMANCE", as they apply to this project.

FAILURE TO COMPLETE THIS FORM IN ITS ENTIRETY BY THE BIDDER WILL RESULT IN THE ENTIRE PROPOSAL BEING CONSIDERED IRREGULAR AND MAY BE REJECTED BY TETON COUNTY, WYOMING.

PROPOSAL EXECUTION CHECKLIST

BIDDERS ARE ENCOURAGED TO USE THE FOLLOWING CHECKLIST WHEN PREPARING THEIR PROPOSAL.

ITEMS TO COMPLETE	COMPLETED
Included BID	()
Included ATTACHMENTS as required by Article 7	()
IS PROPOSAL SIGNED AND DATED?	()
If this is a JOINT BID, have BOTH PARTIES signed the PROPOSAL?	()
IS PROPOSAL NOTARIZED?	()

BID BOND EXECUTION CHECKLIST (If applicable)

ITEMS TO COMPLETE	COMPLETED
Is your surety company's name on it?	()
Is the bond made out for 10% of the amount bid?	()
Is the project number or description filled out	()
Is it dated, signed, sealed and witnessed?	()
Is the power-of-attorney attached to it?	()

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

BID

Bid Due Date:

Description (*Project Name— Include Location*):

BOND

Bond Number:

Date:

Penal sum

\$

(Words)

(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER

SURETY

(Seal)

(Seal)

Bidder's Name and Corporate Seal

Surety's Name and Corporate Seal

By:

Signature

By:

Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest:

Signature

Attest:

Signature

Title

Title

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

CONTRACTING REQUIREMENTS

NOTICE OF AWARD

Date of Issuance:

Owner:

Owner's Contract No.:

Engineer:

Engineer's Project No.:

Project:

Contract Name:

Bidder:

Bidder's Address:

TO BIDDER:

You are notified that Owner has accepted your Bid dated [_____] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

TETON COUNTY LANDFILL WASTE RELOCATION AND EARTHWORKS PROJECT.

The Contract Price of the awarded Contract is: \$ _____ based on unit prices

[4] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically.

a set of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner [4] counterparts of the Agreement, fully executed by Bidder.
2. Deliver with the executed Agreement(s) the Contract security [e.g., performance and payment bonds] and insurance documentation as specified in the Instructions to Bidders and General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any): N/A

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: TETON COUNTY, WYOMING

Authorized Signature

By:

Title:

Copy: Engineer

**AGREEMENT
BETWEEN OWNER AND CONTRACTOR FOR
CONSTRUCTION CONTRACT (STIPULATED PRICE)
TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT**

Prepared by



Issued and Published Jointly by



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**AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between _____ (“Owner”) and
_____ (“Contractor”).

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: The Teton County Landfill Waste Relocation and Earthworks Project.

ARTICLE 3 – ENGINEER

3.01 The Project has been designed by Golder Associates Inc.

3.02 The Owner has retained Golder Associates Inc. (“Engineer”) and Peak GeoSolutions (“Owner’s Representative” and CQA Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

A. The Work will be substantially completed within 171 days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 30 days after the date when the Contract Times ~~commence to run~~expire. Substantial Completion shall mean that the Work is sufficiently complete in accordance with the Contract Documents such that the Owner can utilize the site for its intended purpose and resume normal site operations.

4.03 Liquidated Damages

- ~~A. Liquidated damages will not apply to this contract. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):~~
- ~~B. Substantial Completion: Contractor shall pay Owner \$500.00 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.~~
- ~~C. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$500.00 for each day that expires after such time until the Work is completed and ready for final payment.~~
- ~~D. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.~~
- ~~E.A. Bonus: Contractor and Owner further recognize the Owner will realize financial and other benefits if the Work is completed prior to the time specified for Substantial Completion. Accordingly, Owner and Contractor agree that as a bonus for early completion, Owner shall pay Contractor \$500.00 for each day prior to the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract) that the Work is substantially complete. The maximum value of the bonus shall be limited to \$15,000.00.~~

4.04 Special Damages

- A. ~~In addition to the amount provided for liquidated damages,~~ Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- ~~A. For all Work other than Unit Price Work, a lump sum of: \$ _____.~~

~~All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.~~

~~B.A.~~ For all Lump Sum and Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of ~~Unit Price Work~~ by lump sum or by multiplying the unit price times the actual quantity of that item):

Unit Price Work					
Item No.	Description	Unit	Estimated Quantity	Unit Price	Extended Price
Total of all Extended Prices for Unit Price Work (subject to final adjustment based on actual quantities)					\$

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

~~C.B.~~ Total of Lump Sum Amount and Unit Price Work (subject to final Unit Price adjustment) \$.

~~D.C.~~ For all Work, at the prices stated in Contractor’s Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor’s Applications for Payment on or about the day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments

previously made and less such amounts as Owner may withhold, ~~including but not limited to liquidated damages,~~ in accordance with the Contract

- a. 90 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
- b. 90 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- c. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 All amounts not paid when due shall bear interest at the rate of 1 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:

- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
- B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the ~~General Supplementary~~ Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the ~~General Supplementary~~ Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and

observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to █, inclusive).
 - 2. Performance bond (pages █ to █, inclusive).
 - 3. Payment bond (pages █ to █, inclusive).
 - 4. Other bonds.
 - a. █ (pages █ to █, inclusive).
 - 5. General Conditions (pages █ to █, inclusive).
 - ~~6. Supplementary Conditions (pages █ to █, inclusive).~~
 - ~~7.6.~~ Specifications as listed in the table of contents of the Project Manual.
 - ~~8.7.~~ Drawings (not attached but incorporated by reference) consisting of █ sheets with each sheet bearing the following general title: █ ~~[or]~~ the Drawings listed on the attached sheet index.
 - ~~9.8.~~ Addenda (numbers █ to █, inclusive).
 - ~~10.9.~~ Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages █ to █, inclusive).
 - b. Notice of Award

- c. Insurance Certificates
- d. Worker's Compensation Certificate
- e. Schedule of Rates
- f. List of Suppliers and Subcontractors
- g. Projected Construction Schedule
- a-h. Notice to Proceed.

~~11.10.~~ The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:

- ~~a. Notice to Proceed.~~
 - ~~b.a. Work Change Directives.~~
 - ~~e.b. Change Orders.~~
 - ~~d.c. Field Orders.~~
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
 - C. There are no Contract Documents other than those listed above in this Article 9.
 - D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions ~~and the Supplementary Conditions.~~

10.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract

Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 *Other Provisions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout and underline), ~~or in the Supplementary Conditions.~~

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

By: _____

By: _____

Title: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: _____

Title: _____

Address for giving notices:

Address for giving notices:

License No.: _____
(where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

NOTICE TO PROCEED

Owner: TETON COUNTY, WYOMING Owner's Contract No.:

Contractor: Contractor's Project No.:

Engineer: GOLDER ASSOCIATES INC. Engineer's Project No.: 123-81971A-005

Project: TETON COUNTY LANDFILL Contract Name: WASTE RELOCATION AND EARTHWORKS PROJECT

Effective Date of Contract:

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on , 2016.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the number of days to achieve Substantial Completion is one hundred and seventy one, and the number of days to achieve readiness for final payment is thirty.

Before starting any Work at the Site, Contractor must comply with the following:

Owner: TETON COUNTY, WYOMING

Authorized Signature

By:

Title:

Date Issued:

Copy: Engineer

PERFORMANCE BOND

CONTRACTOR *(name and address):*

SURETY *(name and address of principal place of business):*

OWNER *(name and address):*

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location):*

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: None See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal *(seal)*

Surety's Name and Corporate Seal *(seal)*

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract,

arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced

or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction

Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*:

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form: None See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

(seal)
Contractor's Name and Corporate Seal

(seal)
Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
 12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
 13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
 14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
 15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. **Definitions**
- 16.1 **Claim:** A written statement by the Claimant including at a minimum:
 1. The name of the Claimant;
 2. The name of the person for whom the labor was done, or materials or equipment furnished;
 3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 4. A brief description of the labor, materials, or equipment furnished;
 5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
 - 16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
 - 16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 7. The total amount of previous payments received by the Claimant; and
 8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
 18. Modifications to this Bond are as follows:

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

**STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT**
TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT

Prepared by



Issued and Published Jointly by



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**STANDARD GENERAL CONDITIONS OF THE
CONSTRUCTION CONTRACT**

**TETON COUNTY LANDFILL
WASTE RELOCATION AND EARTHWORKS PROJECT**

MARCH 14, 2016

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance

with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Owner's Representative* —The authorized representative of Engineer and Owner assigned to assist Engineer at the Site. As used herein, the term Owner's Representative includes any assistants or field staff of Owner's Representative and CQA Engineer.
- 28-30. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 29-31. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
- 30-32. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
- 31-33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 32-34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
- 33-35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

- ~~34-36.~~ *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
- ~~35-37.~~ *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
- ~~36-38.~~ *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- ~~37-39.~~ *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- ~~38-40.~~ *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
- ~~39-41.~~ *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
- ~~40-42.~~ *SupplementaryGeneral Conditions*— Revisions to the General Conditions have been indicated by redline/strikeout (for deletions) and underline (for additions).~~The part of the Contract that amends or supplements these General Conditions.~~
- ~~41-43.~~ *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
- ~~42-44.~~ *Technical Data*—Those items expressly identified as Technical Data in the SupplementaryGeneral Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
- ~~43-45.~~ *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other

communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

~~44-46.~~ *Unit Price Work*—Work to be paid for on the basis of unit prices.

~~45-47.~~ *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

~~46-48.~~ *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives:*

1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. *Day:*

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective:*

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:

a. does not conform to the Contract Documents; or

b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).

- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds:* When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance:* When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the General Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance:* After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary General Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; ~~and~~
 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

4. The name and phone number of the designated responsible person to be contacted at any hour in the event of a critical condition requiring immediate attention;
5. The name and phone number of Contractor's on-site "Competent Person", as defined by OSHA 1962.650(b), responsible for safety issues related to Contractor's means and methods of constructing the Work; and
6. A preliminary schedule of materials and equipment procurement.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there

were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or

- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run ~~on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given,~~ on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the

sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and

exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. abnormal weather conditions;
 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

- A. *Limitation on Use of Site and Other Areas:*
 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site,

adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary General Conditions identify:
1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;

2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the General Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.
- C. In the preparation of Drawings and Specifications, Engineer or Engineer's Consultants relied upon the following reports of explorations and tests of subsurface conditions at the site:
1. Geophysical Investigation of the Entrance Properties, Horsethief Canyon Landfill Near Jackson, Wyoming; Golder Associates Inc., December 18, 2015
 2. Geotechnical Engineering Report, Teton County Transfer Station Upgrades; Golder Associates Inc., January 2015
 3. Site Assessment Summary, Teton County Landfill; Golder Associates Inc., August 2012
 4. Geotechnical Site Investigation Report, Teton County Composting Facility, Teton County, Wyoming; Womack & Associates, Inc., May 21, 2007
 5. Subsurface Study for the Proposed Teton County Solid Waste Transfer Facility to be Located Approximately Seven Miles South of Jackson, Wyoming; Chen & Associates, December 11, 1987

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 2. is of such a nature as to require a change in the Drawings or Specifications; or
 3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so. Contractor's failure to give notice of differing site conditions within 15 days of their discovery or before they are disturbed shall constitute a waiver of all claims in connection therewith, whether direct or consequential in nature.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the General Supplementary Conditions:
 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by

Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 Hazardous Environmental Conditions at Site

~~A. Reports and Drawings: There are no reports or drawings relating to Hazardous Environmental Conditions identified at the site that have been utilized by the Engineer in the preparation of the Contract Documents. The Supplementary Conditions identify:~~

~~B. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and~~

~~C.A. Technical Data contained in such reports and drawings.~~

~~D.B. Reliance by Contractor on Technical Data Authorized:~~ Contractor may rely upon the accuracy of the Technical Data expressly identified in the ~~General~~Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

~~E.C.~~ Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

~~F.D.~~ Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

~~G.E.~~ If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide

Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- ~~H.F.~~ Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- ~~H.G.~~ If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- ~~J.H.~~ If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- ~~K.I.~~ To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- ~~L.J.~~ To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

~~M.K.~~ The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the ~~Supplementary~~General Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the ~~Supplementary~~General Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. All bonds shall be signed by a registered Wyoming agent having legal authority to act on behalf of the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article ~~and in the Supplementary~~General Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance

policies for the required limits and coverages. Unless a different standard is indicated in the General Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better. All insurance shall be signed by a registered Wyoming agent having legal authority to act on behalf of the insurance company.

- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the General Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- ~~D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.~~
- ~~E.D.~~ Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- ~~F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.~~
- ~~G.E.~~ If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- ~~H.F.~~ Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- ~~I.G.~~ Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- ~~J.H.~~ The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 Contractor's Insurance

- A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - ~~2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).~~
 - ~~3-2.~~ claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
 3. Foreign voluntary worker compensation (if applicable).
 4. Worker's Compensation, and related coverages under this paragraph:
 - a. State: Statutory
 - b. Applicable Federal: Statutory
 - c. Employer's Liability N/A
- B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 2. claims for damages insured by reasonably available personal injury liability coverage.
 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
 4. Contractor's General Liability under this paragraph shall include completed operations and product liability coverages, and eliminate the exclusions with respect to property under the care, custody, and control of Contractor:
 - a. General Aggregate \$ 2,000,000.00
 - b. Products – Completed Operations Aggregate \$ 1,000,000.00
 - c. Personal and Advertising Injury \$ 1,000,000.00
 - d. Each Occurrence (Bodily Injury and Property Damage) \$ 1,000,000.00
 - e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.
 - f. Excess or Umbrella Liability
 - 1) General Aggregate \$ N.A.
 - 2) Each Occurrence \$ N.A.
- C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.

- b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary General Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
- 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
- 3. Broad form property damage coverage.
- 4. Severability of interest.
- 5. Underground, explosion, and collapse coverage.
- 6. Personal injury coverage.
- 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
- 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

9. Contractor's Contractual General Liability under this paragraph shall provide coverage for not less than the following amounts:

- a. Bodily Injury:
 - 1) Each Accident \$ 1,000,000.00
 - 2) Annual Aggregate \$ 2,000,000.00
- b. Property Damage:
 - 1) Each Accident \$ 1,000,000.00
 - 1)2) Annual Aggregate \$ 2,000,000.00

D. Automobile liability: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis. Automobile Liability under paragraph shall provide coverage for not less than the following amounts:

- 1. Bodily Injury:
 - a. Each Person \$ 1,000,000.00
 - b. Each Accident \$ 2,000,000.00
- 2. Property Damage:
 - a. Each Accident \$ 1,000,000.00
- 3. Combined Single Limit of \$ 2,000,000.00

E. Umbrella or excess liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every

one of the underlying policies. Umbrella or Excess Liability under paragraph shall provide coverage for not less than the following amounts:

1. General Aggregate \$ N.A.

2. Each Occurrence \$ N.A.

F. Contractor's pollution liability insurance: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion. Contractor's pollution liability insurance under paragraph shall provide coverage for not less than the following amounts:

1. General Aggregate \$ N.A.

2. Each Occurrence \$ N.A.

G. Additional insureds: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the SupplementaryGeneral Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements. The following list of persons or entities shall be listed as additional insureds:

OWNER:

Teton County, Wyoming

PO Box 3594

Jackson, WY 83001

ENGINEER:

Golder Associates, Inc.

44 Union Boulevard, Suite 300

Lakewood, Colorado, 80228

OWNER'S REPRESENTATIVE AND CQA ENGINEER:

Peak GeoSolutions

316 West Birch St., Box 820

Glenrock, WY 82637

D.H. Contractor's professional liability insurance: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be

maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.

~~E.I.~~ E.I. *General provisions:* The policies of insurance required by this Paragraph 6.03 shall:

1. include at least the specific coverages provided in this Article.
2. be written for not less than the limits of liability provided in this Article and in the ~~Supplementary~~ General Conditions, or required by Laws or Regulations, whichever is greater.
3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

~~F.J.~~ F.J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

~~A. **Builder's Risk:** Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:~~

- ~~1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under~~

~~such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."~~

- ~~2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.~~
- ~~3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.~~
- ~~4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).~~
- ~~5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).~~
- ~~6. extend to cover damage or loss to insured property while in transit.~~
- ~~7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.~~
- ~~8. allow for the waiver of the insurer's subrogation rights, as set forth below.~~
- ~~9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.~~
- ~~10. not include a co-insurance clause.~~
- ~~11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.~~
- ~~12. include performance/hot testing and start-up.~~

~~13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.~~

~~A. Owner shall not be responsible for purchasing and maintaining any property insurance to protect the interests of the Contractor, Subcontractors or others in the work. The risk of loss will be borne by Contractor, Subcontractors, or others suffering any such loss and if any of them wishes property insurance coverage, each may purchase and maintain it at the purchaser's own expense.~~

~~B. Contractor shall be responsible for any deductible or self-insured retention.~~

~~B-C. Notice of Cancellation or Change:~~ All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.

~~C-D. Deductibles:~~ The purchaser of any required ~~builder's risk or~~ property insurance shall pay for costs not covered because of the application of a policy deductible.

~~D-E. Partial Occupancy or Use by Owner:~~ If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, ~~if it is the purchaser of the builder's risk policy,~~ or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

~~E-F. Additional Insurance:~~ If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.

~~F-G. Insurance of Other Property:~~ If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 Waiver of Rights

A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in

addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the SupplementaryGeneral Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the SupplementaryGeneral Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with

such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

1. The Contractor’s Representative shall be responsible for coordinating and supervising the Contractor’s crew and subcontractors’ work at the Site. The Contractor’s Representative shall be responsible for making sure that the construction activities are conducted in accordance with the Contract Documents. The Contractor’s Representative shall be responsible for pointing out to the Owner’s Representative any discrepancies between the Contract Documents and the field conditions. The Contractor’s Representative shall be responsible for attending all meetings held on the Project. The Contractor’s Representative shall be responsible for keeping a daily log of all construction activities on-site. The Contractor’s Representative shall be responsible for proposing alternate methods, where necessary, to the Owner’s Representative for approval, and signature.

~~1.2.~~ If the Contractor’s Representative encounters conditions on-site that are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the Contractor’s Representative shall be given to the Owner’s Representative and Engineer promptly before conditions are disturbed and in no event later than 3 days after first observance of the conditions. The Owner’s Representative and/or Engineer will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor’s cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Engineer determines that the conditions at the Site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Engineer shall notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Engineer has given notice of the decision. If the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract time, the adjustment shall be referred to the Engineer for initial determination

7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 *"Or Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
- b. Contractor certifies that, if approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier ~~(unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise)~~. Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Owner or Engineer may furnish to any such Subcontractor, Supplier, or other individual or entity, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor, Supplier, or other individual or entity.
- J.K. Owner or Engineer may furnish to any such Subcontractor, Supplier, or other individual or entity, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor, Supplier, or other individual or entity.
- K.L. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- L.M. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- M.N. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- N.O. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- O.P. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- P.Q. Nothing in the Contract Documents:
1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for

the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to

such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary General Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs. Contractor shall provide a full-time, on-site "competent person", as defined by OSHA 1926.650(b) associated with Contractor's means and methods of constructing the work.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples:*

- a. Contractor shall submit the number of Samples required in the Specifications.
- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.

3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- E. *Resubmittal Procedures:*
1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners,

employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.

- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 Other Work

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site. This is an operating Transfer Station and the Contractor must coordinate with Owner, Transfer Station Operator, and site Contractors to maintain required daily operations.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- E. Contractor shall cooperate and coordinate with the performance and scheduling of the Work to facilitate other operations at the site. Contractor shall be bound to the duties and responsibilities of paragraph 8.01.C although comparable provisions may not be provided in direct contracts between Owner and other contractors. Contractor may make a claim therefore as provided in Article 12.01 if Contractor believes that such performance will

involve additional expense to Contractor or requires additional time and the parties are unable to agree as to the amount or extent thereof.

8.02 *Coordination*

- A. Each contractor or utility will be responsible for the coordination, sequencing, and scheduling for the performance of its work with other work and operations at the project site. This is an operating Transfer Station and the Contractor must coordinate with Owner, Transfer Station Operator, and site Contractors to maintain required daily operations.
- ~~A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:~~
- ~~1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;~~
 - ~~2. an itemization of the specific matters to be covered by such authority and responsibility; and~~
 - ~~3. the extent of such authority and responsibilities.~~
- ~~B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.~~

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual

rights against Contractor with respect to the breach of the obligations set forth in this paragraph.

- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

8.04 Claims Between Contractors

- A. Should Contractor cause damage to the work or property of any separate contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any separate contractor against Contractor, Owner, Engineer, Engineer's Consultants, or the construction coordinator, Contractor shall promptly attempt to settle with such separate contractor by agreement, or to otherwise resolve the dispute by arbitration or at law.
- B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Engineer, Engineer's Consultants, the construction coordinator and the officers, directors, partners, employees, agents and other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any separate contractor against Owner, Engineer, Engineer's Consultants, or the construction coordinator or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner, Engineer, Engineer's Consultants or the construction coordinator on account of any such damage or Claim.
- ~~D~~-C. If Contractor is delayed at any time in performing or furnishing Work by any act or neglect of a separate contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 11. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner, Engineer, Engineer's Consultants

and construction coordinator for any delay, disruption, interference, or hindrance caused by any separate contractor. This paragraph does not prevent recovery from Owner, Engineer, Engineer's Consultant, or construction coordinator for activities that are their respective responsibilities.

ARTICLE 9 – OWNER’S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer’s status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner’s duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner’s duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner’s identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner’s responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner’s responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner’s responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner’s Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will

not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

A.B. Upon request of Contractor prior to the execution of any Change Order involving a significant increase in the Contract Price, Owner shall furnish to Contractor reasonable evidence that adequate financial arrangements have been made by Owner to enable Owner to fulfill the increased financial obligations to be undertaken by Owner as a result of such Change Order.

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's ~~R~~representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's ~~R~~representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means,

methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. ~~If Owner and Engineer have agreed that Engineer will furnish an Owner's Representative Resident Project Representative to represent Engineer and Owner at the Site and assist Engineer in observing the progress and quality of the Work and the quality assurance of the construction, then the authority and responsibilities of any such Owner's Representative Resident Project Representative will be as provided as outlined below in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. ~~If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.~~~~
- B. Engineer shall furnish an Owner's Representative to assist in observing performance of the work of Contractor. Through more extensive on-site observations of the work in progress and field checks of materials and equipment by the Owner's Representative, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the work of Contractor; but, the furnishing of such services will not make Engineer or Owner responsible for or give Engineer or Owner control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. The duties and responsibilities of the Owner's Representative are described as follows:
1. General: Owner's Representative dealings in matters pertaining to the Contractor's work in progress shall in general be with Engineer and Contractor, keeping Owner advised as necessary. Owner's Representative dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor.
 2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
 3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
 4. Liaison:
 - a. Serve as Owner's Representative with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of the Contract Documents.
 - b. Assist in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
 5. Construction Quality Assurance (CQA) Engineer

a. Observe and document activities related to the quality assurance of the production, handling, storage, and construction of the Project including coordination of field testing and Owner verification surveys.

6. Interpretation of Contract Documents:

a. Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

7. Shop Drawings and Samples:

a. Record date of receipt of Samples and approved Shop Drawings.

b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.

c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.

8. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with Owner's Representative recommendations to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.

9. Review of Work and Rejection of Defective Work:

a. Conduct on-Site observations of Contractor's work in progress to inform Engineer whether the Work is in general proceeding in accordance with the Contract Documents.

b. Report to Engineer whenever Owner's Representative believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that Owner's Representative believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

c. Owner's Representative may provide specific instructions to Contractor regarding the Work only when the Contract Documents specifically indicate "as directed by Engineer," "as directed by Owner's Representative," or "as directed by CQA Engineer."

10. Inspections, Tests, and System Startups:

a. Consult with Engineer in advance of scheduled major inspections, tests, and systems startups of important phases of the Work.

b. Verify that tests, equipment, and systems start-ups and operating and maintenance training ~re conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.

c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems startups.

d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.

11. Records:

a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor, and other Project related documents.

b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.

c. Record names, addresses and telephone numbers of all Contractors, subcontractors, and major suppliers of materials and equipment.

d. Maintain records for use in preparing Project documentation.

e. Upon completion of the Work, furnish original set of all Owner's Representative and CQA Engineer documentation to Engineer.

12. Reports:

a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.

b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.

c. Furnish to Engineer and Owner copies of all inspection, test, and system startup reports.

d. Report immediately to Engineer the occurrence of any Site accidents, any Hazardous Environmental Conditions, emergencies, or acts of God endangering the Work, and property damaged by fire or other causes.

13. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

14. Completion:

a. Before Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.

- b. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public agencies having jurisdiction over the Work.
- c. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed or corrected.
- d. Observe whether all items on final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.
- e. Owner's Representative shall not:
 - 1) Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
 - 2) Undertake any of the responsibilities of Contractor, subcontractors, suppliers, or Contractor's superintendent.
 - 3) Advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
 - 4) Advise on, issue directions regarding, or assume control over safety precautions and programs in connection with the activities or operations of Owner OF Contractor.
 - 5) Accept Shop Drawing or Sample submittals from anyone other than Contractor.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will

not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Owner's Representative, ~~if any~~.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.

- b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
2. *Work Change Directives*: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
 - 1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 - 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 - 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 - 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in

good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval:* If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim:* If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results:* If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work:* The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of

the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:* Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance:* Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

- D. For those items of Unit Price Work where the Bid Form calls for unit pricing based on bracketed quantities, the Work will be paid at the corresponding unit price up to the maximum bracketed quantity and at subsequent unit prices and bracketed quantity increments thereafter. The Owner reserves the right to reject any unit price for a bracketed quantity increment that they deem to be inconsistent with the unit price provided for the same item of work at a reduced quantity.
- E. For those items of Unit Price Work where the Bid Form calls for a single unit price irrespective of quantity, ~~the unit price of an item of Unit Price Work shall~~ be subject to reevaluation and adjustment under the following conditions:
1. If the total cost of a particular item of Unit Price Work amounts to 10% or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 25% from the estimated quantity of such item indicated in the Agreement; and
 2. If there is no corresponding adjustment with respect to any other item of Work; and
 3. If Contractor believes that contractor has incurred additional expense as a result thereof; or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a claim for an adjustment in the Contract Price in accordance with Article 10 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

~~D.F.~~ Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.

- ~~E.G.~~ Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 2. there is no corresponding adjustment with respect to any other item of Work; and
 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the

Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.

- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment. Contractor shall provide receipts or other evidence that suppliers and subcontractors have received payment from previous progress payments.
 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
- C. *Review of Applications:*
1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the

accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;

- c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
- d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- f. Owner has been required to pay Engineer additional compensation because of Contractor delays or rejection of defective Work.

D. *Payment Becomes Due:*

- 1. Twenty Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;

- k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch

list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such

recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- A. *Payment Becomes Due:* ~~Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor. The Owner shall not be required to make final payment to the Contractor until such time as Wyoming Statutes 16-6-116 and 16-6-117 have been fulfilled. If no claims or liens have been filed within a forty-one (41) day period after the advertised completion and acceptance of the project, final payment shall be due within 20 days thereafter.~~

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- ~~B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.~~

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
1. correct the defective repairs to the Site or such other adjacent areas;
 2. correct such defective Work;
 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and

4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.

- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the SupplementaryGeneral Conditions; or
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the SupplementaryGeneral Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

Work Change Directive No.

Date of Issuance: _____ Effective Date: _____
 Owner: _____ Owner's Contract No.: _____
 Contractor: _____ Contractor's Project No.: _____
 Engineer: _____ Engineer's Project No.: _____
 Project: _____ Contract Name: _____

Contractor is directed to proceed promptly with the following change(s):

Description:

Attachments: *[List documents supporting change]*

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- Non-agreement on pricing of proposed change.
- Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price \$ _____ [increase] [decrease].
 Contract Time _____ days [increase] [decrease].

Basis of estimated change in Contract Price:

- Lump Sum Unit Price
- Cost of the Work Other

RECOMMENDED:

AUTHORIZED BY:

RECEIVED:

By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Approved by Funding Agency (if applicable)

By: _____ Date: _____
 Title: _____

Date of Issuance:

Effective Date:

Owner:

Owner's Contract No.:

Contractor:

Contractor's Project No.:

Engineer:

Engineer's Project No.:

Project:

Contract Name:

The Contract is modified as follows upon execution of this Change Order:

Description:

Attachments: *[List documents supporting change]*

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: \$ _____	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
[Increase] [Decrease] of this Change Order: \$ _____	[Increase] [Decrease] of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____ Engineer (if required)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01 11 00
SUMMARY OF WORK

PART 1 – GENERAL

1.1 SUMMARY

- A. The Work specified in this Contract consists of furnishing all management, supervision, labor, materials, tools, equipment, services, testing and incidentals for the completion of the Work as indicated in the Contract Documents.
- B. Wherever used in the Bidding Requirements or Contract Documents, a term printed with capital letters, including the term's singular and plural forms, will have the meaning indicated in Article 1 of the Agreement (EJCDC C-700).
- C. The information presented in the Bidding Documents illustrates the best information available. Existing field conditions shall be field verified prior to performance of the Work.
- D. Related Sections
 - 1. Section 01 14 00 – Work Restrictions
 - 2. Section 01 31 13 – Project Coordination
 - 3. Section 01 35 29 – Health, Safety, and Emergency Response Procedures

1.2 PROJECT INFORMATION

- A. Project Name: Teton County Transfer Station Waste Relocation and Earthworks Project
- B. ENGINEER's Project No.: 123-81604A
- C. Project Site: Teton County Landfill and Transfer Station
5400 W. US Route 26 / Route 89 / Route 189 / Route 191
Jackson, Wyoming 83001
- D. OWNER: Teton County Integrated Solid Waste and Recycling (Teton County)
- E. ENGINEER: Golder Associates, Inc.
- F. OWNER's REPRESENTATIVE: Peak GeoSolutions
- G. Project will be constructed under a single prime contract.

1.3 DESCRIPTION OF WORK

- A. The Work to be performed under this contract consists of completing the waste excavation and relocation work and developing the final design grades as shown in the Contract Drawings. The Work includes, but is not limited to, the following construction activities:

1. Mobilization and demobilization of all equipment, material, and labor required to complete the Work
2. Coordination with OWNER, Site Operator, and other Site contractors on work areas and construction sequencing
3. Maintaining full-time survey control on Site
4. Providing dust control as necessary or as directed by OWNER's REPRESENTATIVE
5. Installation, maintenance, repair, and replacement of temporary erosion control measures throughout the work
6. Stripping and temporary stockpiling of topsoil
7. Excavation, hauling up canyon, placement, and covering of historical buried municipal solid waste (MSW) and clean soil
8. Backfilling waste excavations below final design grades with on-site glass material and/or clean fill material from Site excavation
9. General Site development and grading to develop final design grades
10. Construction of temporary and permanent haul and access roads
11. Excavation, hauling, and stockpiling of clean fill material from Site borrow area (if necessary)
12. Improvements and maintenance of temporary haul road to Site borrow area (if necessary)
13. Construction of temporary and permanent surface water control features, including stormwater channels, concrete stormwater chutes, drainage culverts, and precast surface water inlet structures
14. Procurement and placement of road base material, asphalt millings (if available), geotextile fabric, and riprap
15. Site restoration, including placement of stockpiled topsoil, seeding/mulching/fertilizing, and placement of temporary erosion control fabric

B. CONTRACTOR responsibilities as required by the Contract Documents include the following:

1. Be solely responsible for all means, methods, techniques, sequences, and procedures of construction, including any necessary construction staking and testing described in the Contract Documents and Specifications.
2. Except as specifically noted, furnish all supervision, labor, materials, tools, supplies, machinery and equipment necessary for completion of the Work as described in the Contract Documents, Contract Drawings and Specifications.
3. Obtain and pay for permits, inspection certificates, governmental fees and licenses required for the Work as necessary for proper performance and completion of the Work, as applicable at time of receipt of bid.
4. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities that bear on performance of the Work.
5. Give required notices in writing with copies to OWNER.
6. Furnish a competent and adequate staff, as necessary for the proper administration, coordination, supervision, and superintendence of the Work; organize the procurement of all materials and equipment so that they will be available at the time they are needed for the Work; and keep an adequate force of skilled workmen on the job to complete the Work in the best and soundest manner in accordance with the requirements of the

Contract Documents and in the most expeditious and economical manner consistent with the interests of the OWNER.

7. Furnish any and all health and safety related items (including a Health & Safety Plan) that may be required in Section 01 35 29 – Health, Safety, and Emergency Response Procedures.
8. Coordinate with OWNER and Site tenant so as to minimize inconvenience and conflict with overall existing Transfer Station and composting operations and to facilitate on-going usage of Site by OWNER.
9. Attend weekly progress meetings at the Site in accordance with Section 01 31 13 – Project Coordination.
10. Review the Site, including existing conditions, existing geotechnical information, and any issues as they pertain to the Project. Field check the existing areas, as required, for accurate construction.
11. Provide containment and disposal of all crating and packaging materials, and remove all debris from the project area and dispose of in a legal manner.
12. Provide any necessary transportation of all CONTRACTOR's construction personnel.
13. Receive, unload, handle, re-handle and store all materials and equipment to be furnished under this Contract.
14. Take all necessary precautions not to interfere with Site operations. Coordination will be necessary between Site operations and CONTRACTOR in order to enable the CONTRACTOR to have access to various portions of the Site to complete the Work. An OWNER's REPRESENTATIVE will be assigned to perform liaison duties between the CONTRACTOR and facility operations.
15. Provide portable toilet facilities for use by CONTRACTOR personnel in a location to be designated by the OWNER.
16. Notify the OWNER by the end of the work day of all accidents and submit a written report to the OWNER's representative giving full details and statements of witnesses, within 24 hours of the accident. In addition, if death, serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the OWNER.
17. Render all necessary assistance and equipment to the OWNER for inspection of the Work. The CONTRACTOR shall provide sufficient, safe and proper facilities at all times for the inspection of the Work by the OWNER. The CONTRACTOR shall provide sufficient advance notice for the OWNER to inspect any portion of the Work.
18. Remove any defective work found to exist, whether the result of poor workmanship, use of defective materials, or damage through the CONTRACTOR's carelessness, and immediately replace with work and materials which conform to the Specifications, or remedy in a manner authorized by the OWNER at the CONTRACTOR's expense.
19. The title of all materials found or removed from existing structures or on the Site remains with the OWNER. The CONTRACTOR shall make such disposition of said materials as directed by the OWNER.
20. Provide all necessary electrical power and fuel for construction and installation as necessary.
21. Obtain and carefully study (or assume responsibility for obtaining and studying) all such examinations, investigations, explorations, tests,

reports and studies which pertain to the subsurface or physical conditions at or contiguous to the Site or otherwise may affect the cost, progress, performance, or furnishing of the Work at the Contract Price, within the Contract Time.

22. The CONTRACTOR must give the ENGINEER and OWNER's REPRESENTATIVE written notice of all conflicts, errors or discrepancies that the CONTRACTOR discovers in the Contract Documents and the written response thereof by the ENGINEER and/or OWNER's REPRESENTATIVE is acceptable to the CONTRACTOR.
23. Submit a detailed schedule for construction within 10 days of Notice of Award to OWNER's REPRESENTATIVE and ENGINEER.

1.4 CONTRACTOR'S USE OF SITE

- A. CONTRACTOR will only have limited access to the Site as described in Section 01 14 00 – Work Restrictions.
- B. CONTRACTOR shall limit use of the Site to the designated areas shown in the Contract Drawings and agreed to with the OWNER. Do not disturb portions of the Site beyond the areas in which the Work is located.
- C. CONTRACTOR shall submit a Project Sequencing Narrative and/or Schedule as part of their Bid summarizing their approach to the sequencing of the waste excavations to ensure that the Site is able to maintain continuous scale house, Transfer Station, composting, and waste diversion operations throughout the duration of the Contract.

1.5 OWNER RESPONSIBILITIES

- A. OWNER responsibilities:
 1. OWNER will arrange for and deliver necessary electronic versions of Contract Drawings to CONTRACTOR for information and coordination of the Work and for installation.
 2. OWNER will furnish the data required of OWNER under the Contract Documents.
 3. OWNER will provide construction quality assurance (CQA) monitoring to observe and record construction and provide oversight on field density testing and density obtained using method techniques performed by CONTRACTOR.
 4. The OWNER will not supervise, direct or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the work. OWNER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.
 5. OWNER will furnish water for construction from an on-site water source.
 6. OWNER will dispose of wastes normally generated by construction (excluding excavation waste) at its Transfer Station as delivered by CONTRACTOR.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 14 00

WORK RESTRICTIONS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: Contractor's access and use of the Site during the performance of the Work.
- B. Related sections:
 - 1. Section 01 31 13 – Project Coordination

1.2 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall submit a Project Sequencing Narrative and/or Schedule as part of their Bid summarizing their approach to the sequencing of the waste excavations to ensure that the Site is able to maintain continuous scale house, Transfer Station, composting, and waste diversion operations throughout the duration of the Contract.

1.3 ACCESS TO SITE

- A. CONTRACTOR personnel and vehicles, which are necessary for completion of the Work, will be provided access to the Site.
- B. The CONTRACTOR shall provide the OWNER with a list of persons he/she wishes to enter upon the OWNER's premises. This list shall be kept up to date at all times and any changes, deletions, or additions may only be made by the CONTRACTOR or his designated representative.

1.4 USE OF PREMISES

- A. The Work will be completed at an operational Transfer Station and composting facility. The Teton County Transfer Station receives waste six days per week (Monday through Saturday), and will maintain continuous scale house, Transfer Station, composting, and waste diversion operations during the duration of the Contract.
- B. The Work under this Contract requires special attention to the scheduling and conduct of the work in connection with existing operations. The CONTRACTOR shall verify project conditions and coordination requirements prior to submission of their Bid.
- C. The CONTRACTOR will have limited use of the Site for execution of the Work, and shall confine operations at the Site to the area(s) identified in the Contract

Drawings. CONTRACTOR shall limit use of premises to construction activities and allow for use, occupancy and operations of OWNER, Site Operator, and other Site contractors. Do not encumber the Site with products and construction equipment. CONTRACTOR shall not use any Site facilities without prior OWNER consent.

- D. Operations: Conduct operations so as to minimize inconvenience and conflict with overall existing Transfer Station, composting, and waste diversion operations and to facilitate ongoing usage of Site by OWNER.
1. Confine operations to specific Work areas within the Contract limits. Portions of the Site beyond the specific Work areas are not to be disturbed until approval by OWNER.
 2. Conduct operations to ensure no unreasonable inconvenience or unsafe or unhealthy condition to OWNER and general public.
 3. Existing utility facilities and services shall remain in uninterrupted service, except as otherwise required.
 4. Existing groundwater monitoring wells and landfill gas probes shall be protected and not disturbed. If CONTRACTOR damages wells or probes, he shall replace the well or probe at no cost to the OWNER.
 5. Limit construction operations to methods and procedures which will not adversely affect the environment of the Site including, but not limited to, noise, dirt, mud dust, odors, air, water or soil pollution, ambient discomfort, inadequate lighting, safety and health hazards, and other undesirable effects and conditions.
- E. Storage: OWNER will provide an on-site area for storage of products, materials, and equipment. The location of the storage area may change throughout the duration of the Work. CONTRACTOR shall assume full responsibility for material protection, safe-keeping, and relocation under this Contract.
1. Relocation: Move any stored products which interfere with operations of the OWNER, Site Operator, or other Site contractors.
 2. Additional Space: Obtain and pay for use of additional off-site storage or work areas needed for operations as acceptable to OWNER, including any associated insurance, transportation, loading and unloading costs.

1.5 WORK COORDINATION

- A. The OWNER will provide an OWNER's representative to perform liaison duties between the CONTRACTOR and facility operations.
- B. Coordinate with OWNER and OWNER's representative so as to minimize inconvenience and conflict with overall existing Transfer Station, composting, and waste diversion operations and to facilitate ongoing usage of Site by OWNER.
- C. Attend weekly progress meetings at the Site in accordance with Section 01 31 13 – Project Coordination. CONTRACTOR shall be prepared to discuss Work progress and future Work scheduling and forecasting for Site staging, sequencing, and availability of completed Work areas for OWNER occupation.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 22 13

MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: administrative and procedural requirements applicable to progress and final payment of Lump Sums and Unit Price pay items established in the Agreement based upon the CONTRACTOR's Bid.
- B. Lump Sums and Unit Price pay items listed in this Section refer to and are the same pay items listed in the Bid Form (EJCDC C-410) and constitute all pay items for completing the Work in this Contract. Compensation for all services, items, materials, and equipment required to complete the Work shall be paid at the Lump Sums and Unit Prices included in the Contract.
- C. All measurements and payments will be based on completed Work performed in strict accordance with the Contract Documents and in accordance with Contract Lump Sums and Unit Prices. Incidental Work and items not listed in the Contract Bid Form will not be paid separately, but will be included in the payment for the listed item or items to which such incidental Work applies.
- D. Lump Sums and Unit Prices include all direct and indirect costs, including CONTRACTOR's overhead and profit for each separately identified item.
- E. The CONTRACTOR shall be responsible for providing all surveying required for the completion and measurement of the Work. No direct or separate payment will be made for survey control throughout the duration of the Work. Compensation for all surveying, including quantity measurement and record drawing as-builts, shall be considered incidental to the Work and shall be included in the CONTRACTOR's Lump Sums and Unit Prices included in the Contract.

1.2 ENGINEER'S ESTIMATE OF QUANTITIES

- A. ENGINEER's estimated quantities for Unit Price pay items, as listed in the Bid Form, are approximate only and are included solely for the purpose of comparison of Bids. OWNER does not expressly or by implication agree that the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity, as OWNER may deem necessary. CONTRACTOR shall be entitled to adjustments in Unit Prices as a result of changes to an estimated quantity pursuant to Article 13.03 of the General Conditions (EJCDC C-700).
- B. Within 10 days after the Effective Date of the Contract, submit a preliminary Schedule of Values for all of the Work which includes quantities and Unit Prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments

during the performance of the Work. Provide a breakdown of Lump Sum items into proposed pay activities.

1.3 PAYMENT PROCEDURES

- A. Contract shall submit Applications for Payment in accordance with Article 15 of the General Conditions (EJCDC C-700).

1.4 LUMP SUM BID ITEMS

- A. Payment items for the Work of this Contract for which Contract Lump Sum payments will be made are listed in the Bid Form (EJCDC C-410). All costs for items of Work which are not specifically mentioned to be included in a particular Lump Sum or Unit Price payment item shall be included in the listed Lump Sum item most closely associated with the Work involved. The Lump Sum price and payment made for each item listed shall constitute full compensation for furnishing all labor, materials, and equipment, and performing any associated CONTRACTOR quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all Work required for which separate payment is not otherwise provided.
- B. Progress payments for Lump Sum payment items will be made in accordance with the pay activities listed in the Schedule of Values that breakdown each Lump Sum and on the basis of Work progress.

1.5 UNIT PRICE BID ITEMS

- A. Payment items for the Work of this Contract on which the Contract Unit Price payments will be made are listed in the Bid Form (EJCDC C-410). The Unit Price and payment made for each item listed shall constitute full compensation for furnishing all labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, survey control, meeting safety requirements, tests, and reports, and for performing all Work required for each of the Unit Price items.
- B. Each Unit Price payment item may be a single pay activity item or may be broken down into pay activities with smaller quantities equal to item total. Contract Unit Price multiplied by agreed quantity is full compensation.

1.6 BID ITEM DESCRIPTIONS

- A. Lump Sums: The Lump Sum Base Bid items shown below are consistent with the Lump Sum items in the Bid Form.

Item 1 – Mobilization/Demobilization

- 1. PAYMENT: Payment will be made for costs to mobilize and demobilize all labor, equipment, supplies, tools, field offices, parts, trailers, portable facilities, fuel tanks, sanitary facilities, and other incidents required to perform the Work, including but not limited to insurance and bonding, locating/verification of existing utilities, construction permits and fees, construction Stormwater Pollution Prevention Plan (SWPPP), dust control, installation and maintenance of temporary erosion control, site administration

- expenses, utilities to the job trailer including power, telephone, etc., and site cleanup to the satisfaction of the OWNER.
2. UNIT OF MEASURE: Lump Sum. Payment shall be made at the Lump Sum price, not to exceed 10% of the total Bid Price, at the rate of 50% of the Lump Sum with the first invoice and 50% following Substantial Completion of the Contract.
 3. MEASUREMENT: There shall be no measurement for payment.

Item 2 – Special Waste Storage and Handling Area

1. PAYMENT: Full compensation for all labor, materials, equipment, and incidentals associated with establishment, management, and maintenance of the temporary waste storage area as required by the Contract Documents, including but not limited to earthworks, furnishing HDPE geomembrane liner, providing overpack drums prior to excavation work, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Lump Sum
3. MEASUREMENT: There shall be no measurement for payment.

Item 3 – Existing Surface Water Inlet Connection

1. PAYMENT: Full compensation for all labor, materials, equipment, and incidentals required to provide connection between culvert pipe and existing surface water drop inlet structure, including survey control, excavation to expose existing inlet structure wall, coring of the existing structure wall, connection and sealing culvert pipe with existing structure, backfill and compaction, general surface restoration, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Lump Sum
3. MEASUREMENT: There shall be no measurement for payment.

Item 4 – Force Account

1. PAYMENT: Full compensation for unforeseen and minor items not addressed in the Contract Documents that will be paid as authorized by OWNER.
2. UNIT OF MEASURE: Depending on the nature of the work involved, Force Account work shall be priced on a lump sum, unit price, or time and materials basis.
3. MEASUREMENT: Methods of measurement shall be approved prior to performing the Force Account work. All approved Force Account work shall be documented with daily summaries of all labor hours and rates, equipment, material invoices and other appropriate information that will be reviewed and approved by the OWNER's REPRESENTATIVE and shall be provided to the OWNER's REPRESENTATIVE within five working days of the actual event. If the documentation is not provided within this time period, the OWNER may deny payment of the work

- B. Unit Prices: The Unit Price Base Bid items shown below are consistent with the Unit Price items in the Bid Form

Item 5 – Strip, Stockpile, and Re-apply Topsoil

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated with stripping and stockpiling topsoil from within the waste relocation area to the depths required by the Contract Documents and placing the topsoil as required by the Contract Documents or as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Cubic yardage of material stripped.
3. MEASUREMENT: The total quantity of stripped topsoil for which payment shall be made shall be computed by measurement in the haul vehicle or, If CONTRACTOR transports the material in vehicles not adapted for measurement, in its original position computed by field survey or computation by average end area method with no correction for curvature as approved by OWNER's REPRESENTATIVE.

Item 6 – Waste Excavation, Haul, Placement, and Cover

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated with excavation of waste materials, hauling up-canyon to waste relocation area, placement, and cover as required by the Contract Documents, including maintaining safe excavation and fill slopes, development and maintenance of temporary haul roads, development of stormwater channel grades, providing traffic control as necessary, maintaining full-time survey control, coordination with site operations, placement of daily cover and intermediate cover, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE. In accordance with the General Conditions, payment will be made at the unit price corresponding to the measured quantity.
2. UNIT OF MEASURE: Cubic yardage of material excavated.
3. MEASUREMENT: The total quantity of waste excavation for which payment shall be made under this Bid Item shall be computed by measurement in the excavation through survey. The percentage of waste excavation to be paid under this Item versus clean soil excavation to be paid under Item 7 shall be agreed to between the CONTRACTOR and OWNER's REPRESENTATIVE at the time of excavation and/or measurement for each excavation area.

Item 7 – Clean Soil Excavation, Haul, Placement, and Compaction

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated with excavation of clean soil, hauling up-canyon to waste relocation area, and placement and compaction as required by the Contract Documents, including maintaining safe excavation and fill slopes, development and maintenance of temporary haul roads, development of stormwater channel grades, providing traffic control as necessary, maintaining full-time survey control, conformance with seasonal work area limitations, coordination with site operations, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE. In accordance with the General Conditions, payment will be made at the unit price corresponding to the measured quantity.
2. UNIT OF MEASURE: Cubic yardage of material excavated.
3. MEASUREMENT: The total quantity of clean soil excavation for which payment shall be made under this Bid Item shall be computed by measurement in the excavation through survey. The percentage of clean soil excavation to be paid under this Item versus waste excavation to be paid under Item 6 shall be agreed

to between the CONTRACTOR and OWNER's REPRESENTATIVE at the time of excavation and/or measurement for each excavation area.

Item 7X – Clean Soil Excavation, Stockpile, Backfill, and Compaction

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated with the excavation of clean soil, temporary stockpiling near the excavation area, backfilling, compacting, and grading clean soil in waste excavations to final design grades, and maintaining full-time survey control. CONTRACTOR will only be directed by ENGINEER or OWNER's REPRESENTATIVE to excavate, stockpile, and backfill clean soil under this Bid Item dependent on actual excavation quantities and fill progression in the waste relocation area under Bid Items 6 and 7.
2. UNIT OF MEASURE: Cubic yardage of material excavated.
3. MEASUREMENT: The total quantity of clean soil excavation for which payment shall be made under this Bid Item shall be computed by measurement in the excavation through survey. The percentage of clean soil excavation to be paid under this Bid Item shall be agreed to between the CONTRACTOR and OWNER's REPRESENTATIVE at the time of excavation and/or measurement for each excavation area.

Item 8 – Backfill with Existing Site Debris Stockpiles

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated with backfilling waste excavations below final design grades with existing debris stockpiles on-site, including hauling debris to waste excavation areas, mixing with clean fill as necessary, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Cubic yardage of existing debris material backfilled.
3. MEASUREMENT: The total quantity of clean existing debris material for which payment shall be made shall be computed by field survey or field measurement of the existing debris stockpiles prior to backfilling performed by OWNER's REPRESENTATIVE.

Item 9 – Clean Soil Borrow Excavation, Haul, Backfill, Compact, and Grade

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated obtaining clean borrow soil from the on-site borrow area located on the southeast ridge of canyon, hauling, and backfilling, compacting, and grading clean borrow soil in waste excavations to final design grades, including development of stormwater channel design grades, maintenance of temporary access and haul road to the on-site borrow source, maintaining full-time survey control, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Cubic yardage of clean borrow fill excavated.
3. MEASUREMENT: The total quantity of clean borrow soil material for which payment shall be made shall be computed by field survey of the borrow area prior to and after borrow operations.

Item 10 – WYDOT Class W Road Base

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the procurement, hauling, placement, and compaction

of Class W road base material as required by the Contract Documents and as directed by the OWNER's REPRESENTATIVE.

2. UNIT OF MEASURE: Square yardage of Class W road base.
3. MEASUREMENT: The total quantity of Class W road base material for which payment shall be made shall be computed by field survey or field measurement of the square yardage of area where "Class W" material was installed.

Item 11 – Finish Grading of Stormwater Channels

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals required to finish grade the stormwater channels to within ± 0.1 feet of the design grades shown in the Contract Drawings, including survey control. The earthwork associated with the development of the stormwater channels will either be paid under Line Items 6, 7, or 9 depending on the presence of waste along the channel alignments.
2. UNIT OF MEASURE: Linear footage of channel finish graded.
3. MEASUREMENT: The total quantity of channel for which payment shall be made shall be determined by field survey or field measurement along the centerline of the channels.

Item 12 – Precast Surface Water Inlet Structure

1. PAYMENT: Full compensation for all labor, materials, equipment, and incidentals required to furnish, haul, deliver, and install the surface water drop inlet structure and grating as required by the Contract Documents, including excavation, compaction, furnishing and installing bedding material, lifting and placement of structure, providing connection and sealing culvert pipe, backfilling, general surface restoration, survey control, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Each
3. MEASUREMENT: There shall be no measurement for payment.

Item 13 – Concrete Surface Water Channel

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated with the construction of the concrete surface water channel and dissipation structure as shown in the Contract Documents, including survey control, preparation of approved subgrade, concrete mix design and cylinder testing, furnishing and placing all formwork, reinforcement, and concrete, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE. Finish grading of the channel subgrade will be paid under Line Item 11.
2. UNIT OF MEASURE: Cubic yardage of concrete.
3. MEASUREMENT: The total quantity of concrete for which payment shall be made shall be computed by the cubic yardage of concrete installed, as measured by field measurement.

Item 14 – Drainage Culvert Pipe (18-inch CMP)

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the construction of the 18-inch CMP drainage culvert pipe as shown in the Contract Documents, including survey control, trench excavation, furnishing and installing pipe bedding, furnishing and installing pipe including bends, fittings, and appurtenances, providing connections to

- structures, backfilling trench, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE..
2. UNIT OF MEASURE: Linear footage of pipe installed.
 3. MEASUREMENT: The total quantity of culvert pipe for which payment shall be made shall be determined by field measurement along the centerline of the pipe prior to trench backfill.

Item 15 – Drainage Culvert Pipe (30-inch CMP)

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the construction of the 30-inch CMP drainage culvert pipe as shown in the Contract Documents, including survey control, trench excavation, furnishing and installing pipe bedding, furnishing and installing pipe including bends, fittings, and appurtenances, providing connections to structures, backfilling trench, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE..
2. UNIT OF MEASURE: Linear footage of pipe installed.
3. MEASUREMENT: The total quantity of culvert pipe for which payment shall be made shall be determined by field measurement along the centerline of the pipe prior to trench backfill.

Item 16 – Drainage Culvert Pipe (36-inch CMP)

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the construction of the 36-inch CMP drainage culvert pipe as shown in the Contract Documents, including survey control, trench excavation, furnishing and installing pipe bedding, furnishing and installing pipe including bends, fittings, and appurtenances, providing connections to structures, backfilling trench, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE..
2. UNIT OF MEASURE: Linear footage of pipe installed
3. MEASUREMENT: The total quantity of culvert pipe for which payment shall be made shall be determined by field measurement along the centerline of the pipe prior to trench backfill.

Item 17 – Riprap

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the procurement, hauling, and placement of riprap as required by the Contract Documents, including furnishing geotextile fabric and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE..
2. UNIT OF MEASURE: Tonnage of riprap
3. MEASUREMENT: The total quantity of riprap for which payment shall be made shall be determined by verification of actual weight of riprap delivered and placed within the limits shown in the Contract Documents.

Item 18 – Seed/Mat/Fertilize – Steep Slopes

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the seeding, matting, and fertilizing of slopes greater than 4H:1V as required by the Contract Documents, including furnishing and installing erosion control fabric, providing and placing the seed mix, mulch, and fertilizer as specified, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE..

2. UNIT OF MEASURE: Acre, or part thereof.
3. MEASUREMENT: The total quantity of seeding, mulching, and fertilizing for which payment shall be made shall be determined from field survey.

Item 19 – Seed/Mulch/Fertilize – 4H:1V Slope

1. PAYMENT: Full compensation for all labor, materials, equipment, and other incidentals associated the seeding, mulching, and fertilizing of the 4H:1V transition slope as shown in the Contract Drawings and as required by the Contract Documents, including furnishing and installing erosion control fabric, providing and placing the seed mix, mulch, and fertilizer as specified, and any other work deemed necessary to complete the Work as directed by the OWNER's REPRESENTATIVE.
2. UNIT OF MEASURE: Acre, or part thereof.
3. MEASUREMENT: The total quantity of seeding, mulching, and fertilizing for which payment shall be made shall be determined from field survey.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 24 13

VALUE ENGINEERING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. CONTRACTOR may submit a written Value Engineering Contractor Proposal (VECP) for modification to the Project that will result in some benefit to the OWNER.
- B. Each VECP shall include the following:
 - 1. Statement that the proposal is for a VECP.
 - 2. Description of the difference between the existing Contract and the proposed change. Identify advantages and disadvantages of each.
 - 3. Separate detailed cost estimates for both the existing Contract requirements and the proposed changes. All cost estimates shall include CONTRACTOR overhead and profit.
 - 2. A detailed itemization of the plan sheets and specifications that would require modification under the VECP.
 - 3. Engineering or other analysis in sufficient detail to support review and evaluation of the VECP.
 - 4. Information including supporting test results or evaluations of similar VECP conditions and results.
 - 5. Statement specifying the date by which the VECP must be executed to obtain the maximum benefit.
 - 6. Statement detailing the effect the VECP will have on the Contract completion date.
- C. Cost savings resulting from a VECP shall be shared between the CONTRACTOR and the OWNER as indicated in this specification.

1.2 MISCELLANEOUS CONDITIONS

- A. VECPs may be rejected for any reason. The Work shall be completed in accordance to the contract if a VECP is rejected.
- B. OWNER may reject any VECP that will require excessive time or costs for review.
- A. Contractor shall have no claim against the OWNER for additional costs or delays resulting from the rejection of a VECP.
- B. CONTRACTOR shall have no claim against the OWNER for monetary damages or time delays based on the failure to respond to within the time indicated if additional information is needed to complete the review.
- C. Plan errors identified by the CONTRACTOR and resulting in a cost reduction will not qualify for a VECP.

- D. A VECP shall only apply to the current contract and shall impose no restrictions on its use or disclosure.
- E. A VECP shall not contain experimental features that have not been proven under similar or acceptable conditions.
- F. A VECP will not be considered if equivalent options are provided in the contract.
- G. VECPs will only be considered when submitted from the CONTRACTOR. No VECPs will be considered directly from subcontractors or suppliers

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall submit three copies of each VECP to the OWNER or OWNER's REPRESENTATIVE.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 AUTHORIZATION

- A. Accepted VECPs shall be authorized by an executed Change Order or supplemental agreement to the Contract.

3.2 PAYMENT

- A. Accepted VECPs changes will be incorporated into the Contract by changes to the contract quantities at the contract unit prices or Change Order, as appropriate under the Contract.
- B. The Owner will pay the CONTRACTOR 55% of any savings to the OWNER from the difference between the cost of the referenced item as calculated from the original contract, and the reduced cost of the item resulting from the accepted VECP. The CONTRACTOR's VECP proposal preparation, development, review, and processing costs will not qualify for additional payment.

END OF SECTION

SECTION 01 31 13

PROJECT COORDINATION

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: Requirements for Project meetings related to management, administration, procedure, and quality assurance of the Work, including, but not limited to, the following:
1. Pre-construction meeting.
 2. Progress meetings.
 3. Specially called meetings throughout the progress of the Work.

1.2 RESPONSIBILITIES

- A. Scheduling and administration of project meetings is the responsibility of the OWNER's REPRESENTATIVE. The responsibilities include, but are not limited to the following:
1. Prepare agendas.
 2. Distribute written notice and agendas of regular and specially called meetings (4) four days in advance of meeting date.
 3. Make physical arrangement for meetings.
 4. Preside at the meetings.
 5. Record minutes and include significant proceedings and decisions.
 6. Distribute copies of minutes within three days after each meeting:
 - a. To all participants in meeting.
 - b. To all parties affected by decisions made at the meeting.
- B. Representatives of CONTRACTOR and subcontractors attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.3 PRE-CONSTRUCTION MEETING

- A. Time: Schedule within seven (7) days before the date of commencement of the Work established in the Contract Documents.
- B. Location: Project site office of OWNER, except as otherwise designated in the meeting notice.
- C. Attendance:
1. OWNER's REPRESENTATIVE
 2. CONTRACTOR
 3. Subcontractors
 4. Site Operator
 5. Site contractors

- D. Minimum agenda
1. Distribution and discussion of:
 - a. Schedule of Values
 - b. Work phasing schedule
 - c. Project progress schedule
 - d. CONTRACTOR's Health and Safety Plan
 2. Critical work sequencing.
 3. Use of Premises:
 - a. Access to project site.
 - b. Office, work and storage areas.
 4. Major product deliveries and priorities.
 5. Work coordination:
 - a. Relation and coordination with existing site operations.
 - b. Relation and coordination of subcontractors.
 - c. Designation of responsible personnel.
 6. Procedures and processing of:
 - a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change orders.
 - e. Application of payment.
 7. Adequacy of distribution of Contract Documents.
 8. Procedures for maintaining record documents.
 9. Temporary facilities, controls and construction aids.
 10. Temporary utilities.
 11. Security procedures.
 12. Housekeeping procedures.

1.4 PROGRESS MEETINGS

- A. Time:
1. Schedule regular periodic meetings as required by OWNER, but not less than every seven days, except as otherwise required.
 2. Hold specially called meetings as required by work operations, progress of the work or as required by OWNER.
- B. Location: Project site office of the OWNER, except as otherwise designated in the meeting notice.
- C. Attendance:
1. OWNER's REPRESENTATIVE
 2. CONTRACTOR
 3. Subcontractors
 4. Site Operator
 5. Site contractors
- D. Minimum agenda:
1. Review and acceptance of minutes of previous meeting.
 2. Review of work progress since previous meeting.
 3. Review of any Health and Safety issues.
 4. Note field observations, problems and decisions.

5. Discuss any problems which may impede planned progress.
6. Review off-site fabrication and delivery problems and schedules.
7. Develop corrective measures and procedures to regain projected progress schedule.
8. Revisions to progress schedule as required.
9. Plan progress for periods after the initial work period.
10. Coordinate projected progress with separate contractors as needed.
11. Review submittals schedules, and expedite as required to maintain project progress schedule.
12. Maintaining of quality standards.
13. Review proposed changes for:
 - a. Effect on progress schedule.
 - b. Effect on completion date.
 - c. Effect on separate contracts of Project.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 35 29

HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: Requirements for CONTRACTOR's Health and Safety Plan (HASP).
- B. The CONTRACTOR shall, for the purposes of the Occupational Health and Safety Act and for the duration of the Work of this Contract, be the "prime contractor" for the "work site" and do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Act and its regulations, as required to ensure the health and safety of all persons at the "work site."

1.2 REFERENCES

- A. Regulatory Requirements: Laws and Regulations applying to the Work under this Section include, but are not limited to:
 - 1. 29 CFR Part 1904 (OSHA), Recording and Reporting Occupational Injuries and Illnesses.
 - 2. 29 CFR 1910 (OSHA), Occupational Safety and Health Standards.
 - 3. 29 CFR 1926 (OSHA), Safety and Health Regulations for Construction.
 - 4. 49 CFR 171.8, Transportation, Definitions and Abbreviations.
 - 5. 49 CFR 258, Criteria for Municipal Solid Waste Landfills
 - 5. Wyoming Department of Environment Quality (WDEQ) Solid Waste Regulations and Hazardous Waste Regulations.
 - 6. Wyoming Occupational Safety and Health Administration (Wyoming OSHA) regulations

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall submit HASP to the OWNER's REPRESENTATIVE prior to pre-construction conference.
 - 1. OWNER's REPRESENTATIVE's review and acceptance of HASP will be only to determine if the topics covered in HASP comply with the Contract Documents.
 - 2. OWNER's REPRESENTATIVE's review and acceptance will not extend to safety measures, means, methods, techniques, procedures of construction, or whether representations made in the HASP comply with Laws and Regulations, or standards of good practice.
- C. WORK at the Site will be prohibited until the written HASP has been accepted by OWNER's REPRESENTATIVE.

- D. Notwithstanding other provisions of the Contract Documents, changes in the Contract Price or Contract Times will not be authorized due to delay by CONTRACTOR in developing, submitting, or revising the HASP.

1.4 CONTRACTOR'S HEALTH AND SAFETY PROGRAM

- A. CONTRACTOR shall prepare and maintain a written, Site-specific, Health and Safety Plan (HASP), and conduct all construction activities in safe manner that avoids:
1. Injuries to employees, subcontractors, and other persons with an interest at or near the Site;
 2. Significant increases in concentrations of contaminants in soil, water, or sediment near the Site; or
 3. Violations of OSHA, or other Laws or Regulations.
- B. The HASP shall be prepared submitted by the CONTRACTOR and approved by the OWNER. The HASP will be kept at the Site, and shall address safety and health hazards of each phase of Work at the Site and shall include requirements and procedures for employee protection. The HASP shall address and include the following:
1. CONTRACTOR's organizational structure.
 2. Comprehensive work plan.
 3. Safety and health risk or hazard analysis for each task and operation found in the work plan.
 4. Contingency planning for handling and management of regulated waste types.
 5. Employee training assignments including copies of OSHA 24-hour supervised field activities and eight-hour refresher training certificates for each CONTRACTOR and subcontractor.
 6. Personal protective equipment (PPE) to be used by employees for each task and operation being conducted and decontamination procedures.
 7. Medical Surveillance Requirements: Medical clearance certificates for all CONTRACTOR and subcontractor employees assigned to the Project.
 8. Frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment.
 9. Site control measures, including:
 - a. Preventing trespassing;
 - b. Preventing unqualified or unprotected workers from entering restricted areas by development of safe work zones and site controls;
 - c. Preventing "tracking" of contaminants out of the Site;
 - d. Maintaining log of employees at the Site and visitors to the Site;
 - e. Communicating routes of escape and gathering points.
 - f. Air emissions controls (for each type of waste that may be encountered).
 10. Response plan for safe and effective responses to special waste and hazardous waste including necessary PPE and other equipment.
 11. Handling and sampling of intact drums.

- B. Organizational Structure:
1. Organizational structure portion of the HASP shall refer to or incorporate information on specific chain of command and specify the overall responsibilities of supervisors and employees, and shall include the following:
 - a. Designation of general supervisor who has responsibility and authority to direct all operations.
 - b. Name of Site safety representative who has responsibility and authority to implement and modify the HASP and verify compliance.
 - c. Other personnel required for operations at the Site and emergency response, and general functions and responsibilities of each.
 - d. Lines of authority, responsibility, and communication.
 2. Review and update organizational structure as necessary to reflect current status of Site operations and personnel.

1.5 ACCIDENT REPORTING AND INVESTIGATION

- A. Comply with 29 CFR 1904.29, including using OSHA 300, 300-A, and 301 forms (or equivalent) to document all accidents that result in bodily injury.
- B. Submit copies of completed accident reports to OWNER's REPRESENTATIVE.
- C. Based upon results of accident investigation, modify the HASP as required by changing tasks or procedures to prevent reoccurrence of accident.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 35 43

ENVIRONMENTAL PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: Requirements for environmental mitigation procedures including preparation of Stormwater Pollution Prevention Plan (SWPPP) and dust control
- B. This Section is intended to ensure that construction is achieved with a minimum of disturbance to the existing ecological balance at and adjacent to the project site. These are general guidelines. It is the CONTRACTOR's responsibility to determine the specific construction techniques to meet these guidelines.

1.2 APPLICABLE REGULATIONS

- A. CONTRACTOR shall comply with all applicable Federal, State, and local laws and regulations concerning environmental pollution control.

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. The CONTRACTOR shall submit three copies of the SWPPP to the OWNER's REPRESENTATIVE at least seven working days prior to the scheduled start of construction activities.

1.4 ENVIRONMENTAL REQUIREMENTS

- A. CONTRACTOR shall provide and maintain methods, equipment, and temporary construction, as required, to provide controls over environmental conditions at the Site and prevent environmental pollution in conformance with applicable laws and regulations, during and as the result of construction operations under this Contract. For the purpose of this Specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or aesthetically degrade the utility of the environment.
 - 2. The control of environmental pollution requires consideration of air, water, and land, and involves management of noise and solid waste, as well as other pollutants.
 - 3. CONTRACTOR shall take action with regard to construction activity as directed by OWNER, OWNER's REPRESENTATIVE, or ENGINEER.
- B. The CONTRACTOR shall prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the OWNER's REPRESENTATIVE. The Plan shall outline the methods to be used by the CONTRACTOR to schedule and control all Work in a manner that will minimize the erosion of soils in the area of the Work. The Erosion and Sedimentation Control Plan must describe and show how the CONTRACTOR

will provide erosion control measures such as silt fence, staked hay bales, temporary diversion channels, sedimentation controls, berms, seeding, mulching or other special surface treatments as are required to prevent silting of permanent diversion channels excess erosion of disturbed surfaces prior to and after establishment of re-vegetation. Erosion control measures shall be installed prior to commencement of construction activities, or as necessary as the Work progresses, and shall be maintained throughout the construction period or as dictated by the OWNER's REPRESENTATIVE. All erosion control measures shall be in place in an area prior to any construction activity in that area.

1. CONTRACTOR must file Notice of Intent (NOI) to request discharge authorization for stormwater from large construction activities (General Permit WRY10-0000) and include a copy of the NOI in the SWPPP.
2. All phases of sedimentation and erosion control shall comply with and may be subject to the approval of the Wyoming Department of Environmental Quality (WDEQ). CONTRACTOR shall prepare a SWPPP sedimentation and erosion control drawing (and include within the SWPPP) meeting the requirements for approval by that agency.

1.5 DUST CONTROL

- A. CONTRACTOR shall perform dust control operations, in an approved manner, whenever necessary or when directed by the OWNER's REPRESENTATIVE, even though other Work on the Project may be suspended. Dust control shall be generally accomplished by the use of water; however, the use of calcium chloride may be used when necessary, as approved by the OWNER's REPRESENTATIVE, to control dust nuisance. CONTRACTOR shall use suitable means for obtaining and dispersing water for dust control activities.
- B. No direct or separate payment will be made for dust control throughout the duration of the Work. Compensation for dust control shall be considered incidental to the Work and shall be included in the CONTRACTOR's mobilization lump sum and/or unit prices included in the Contract.

1.6 NOTIFICATION

- A. The OWNER will notify the CONTRACTOR in writing of any non-compliance with the foregoing provisions or of any environmentally objectionable acts and corrective action to be taken. If applicable, State or local agencies responsible for verification of certain aspects of the environmental protection requirements shall notify the CONTRACTOR in writing of any non-compliance with State or local requirements. The CONTRACTOR shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the CONTRACTOR or his/her authorized representative at the site of the Work, shall be deemed sufficient for the purpose. If the CONTRACTOR fails or refuses to comply promptly, the OWNER may issue an order stopping all or part of the WORK until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the CONTRACTOR unless it is later determined that the CONTRACTOR was in compliance.
- B. CONTRACTOR must file Notice of Intent (NOI) to request discharge authorization for stormwater from large construction activities (General Permit WRY10-0000) and include a copy of the NOI in the CONTRACTOR's SWPPP.

1.7 IMPLEMENTATION

- A. Prior to commencement of the Work, CONTRACTOR shall meet with the OWNER's REPRESENTATIVE to develop mutual understandings relative to compliance with this provision and administration of the environmental pollution control program.
- B. CONTRACTOR shall remove temporary environmental control features, when approved by the OWNER's REPRESENTATIVE, and incorporate permanent control features into the project at the earliest practicable time.

PART 2 – PRODUCTS

2.1 DUST CONTROL

- A. Dust control shall generally be accomplished by the use of water.
- B. Water will be provided by OWNER on-site for dust control purposes.

PART 3 – EXECUTION

3.1 EROSION CONTROL

- A. CONTRACTOR shall provide positive means of erosion control such as shallow ditches and berms around construction to carry off surface water. Erosion control measures, such as siltation basins, hay/straw check dams, mulching, jute netting, silt fences, and other equivalent techniques, shall be used as appropriate. CONTRACTOR shall use reasonable care to divert surface water run-on around construction areas. Flow of surface water into excavated and graded areas shall be prevented to the extent practicable.

3.2 PROTECTION OF LAND RESOURCES

- A. Land resources within the Project boundaries and outside the limits of permanent Work shall be restored to a condition, after completion of construction that will appear to be natural and not detract from the appearance of the Project. Confine all construction activities to areas shown in the Contract Drawings.
- B. Outside of areas requiring earthwork, the CONTRACTOR shall limit the amount of disturbance of surrounding brush and grass.
- C. If the CONTRACTOR proposes to construct temporary roads or embankments and excavations for Work areas, he/she shall submit the following items for approval by the OWNER's REPRESENTATIVE at least 5 days prior to scheduled start of such temporary work:
 - 1. A layout of all temporary roads, excavations, and embankments to be constructed within the Work area and a plan for restoring these areas.
 - 2. Details of temporary road construction.
 - 3. A drawing shall be submitted to indicate location of barriers required to control vehicular traffic passing close to road edges to be maintained undamaged. The drawing shall provide for the obliteration of construction scars as such and shall provide for a natural-appearing final condition of the area. Modification of the CONTRACTOR's approved drawing shall be made

only with the written approval of the OWNER's REPRESENTATIVE. No unauthorized road construction, excavation or embankment construction including disposal areas will be permitted.

- D. Remove all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess of waste materials, or any other vestiges of construction at the completion of the Work and as directed by the OWNER's REPRESENTATIVE.

3.3 PROTECTION OF AIR QUALITY

- A. The use of burning at the project site for the disposal of refuse and debris will not be permitted.
- B. Dust Control:
 - 1. CONTRACTOR shall be responsible for controlling objectionable dust emanating from all excavations, grading, embankment, stockpiles, access roads, borrow areas and all other work areas within or without (where applicable to CONTRACTOR's work) the project boundaries so that it does not cause the standards for air pollution to be exceeded nor cause a hazard or nuisance to others.
 - 2. CONTRACTOR shall perform dust control operations whenever necessary or when directed by the OWNER or OWNER's REPRESENTATIVE, even though other work on the project may be suspended.
 - 3. Methods of controlling dust shall meet all air pollutant standards as set forth by Federal and State regulatory agencies.
 - 4. An approved method of stabilization consisting of sprinkling or other similar methods will be permitted to control dust. The use of petroleum products is prohibited.
 - 5. Sprinkling, to be approved and effective, must be repeated at such intervals as to keep all parts of the disturbed area and all unpaved haul roads in such a condition to minimize nuisance dust emissions, and the CONTRACTOR must have sufficient competent equipment on the job to accomplish this if sprinkling is used. Dust control shall be performed as the Work proceeds and whenever a dust nuisance or hazard occurs, as determined by the OWNER's REPRESENTATIVE.

3.4 MAINTENANCE OF POLLUTION CONTROL FACILITIES DURING CONSTRUCTION

- A. CONTRACTOR shall perform Site inspections and assessments as required in applicable stormwater permits and this Section. Inspections and assessments shall be done by CONTRACTOR's site superintendent or project manager, together with OWNER's REPRESENTATIVE.
- B. Inspections:
 - 1. During the Work, Site inspections shall be performed:
 - a. After SWPPP controls are provided and prior to starting other Work at the Site.
 - b. A minimum of every seven calendar days.
 - c. Within 24 hours of the end of a wet weather event with ½-inch or more of precipitation
 - d. Prior to CONTRACTOR submitting the Notice of Termination.

2. During each inspection, CONTRACTOR shall verify sediment control practices and record approximate degree of sediment accumulation as a percentage of acceptable sediment storage volume; inspect erosion and sediment control practices and record maintenance performed; observe and record deficiencies relative to implementation of the SWPPP.
- C. CONTRACTOR shall cooperate with representatives of authority having jurisdiction during periodic visits to Site, and promptly provide information requested by authority having jurisdiction.
 - D. CONTRACTOR shall complete repairs to SWPPP controls per applicable requirements and to satisfaction of OWNER's REPRESENTATIVE within two calendar days of each inspection

3.5 NOISE CONTROL

- A. CONTRACTOR shall make every effort to minimize noises caused by his/her operations. Equipment shall be equipped with silencers or mufflers designed to operate with the least possible noise in compliance with State and Federal regulations.

3.6 FIRE PRECAUTIONS

- A. Smoking and Lunch Fires:
 1. Smoking is prohibited except inside a vehicle located away from the active site and existing operations, or other area specifically approved by the OWNER's REPRESENTATIVE.
 2. The building of camp, lunch, warming, and other fires within the construction area and vicinity is prohibited.
- B. Spark Arrester and Mufflers:
 1. Operating or using any internal combustion engine, on any timber, brush, or grass-covered land, including trails and roads traversing such land, without a spark arrester, maintained in effective working order, meeting either (I) Department of Agriculture, Forest Service standard 5100, "SPARK ARRESTERS FOR INTERNAL COMBUSTION ENGINES," (current edition); or (II) the Society of Automotive Owner's Representatives (SAE) recommended Practices J335, "MULTIPOSITION SMALL ENGINE EXHAUST SYSTEM FIRE IGNITION SUPPRESSION," (current revision) and J350, 36 CFR 261.52(j), is prohibited.
 2. Passenger-carrying vehicles, pickups, medium and large highway trucks (80,000 GVW) must be equipped with a factory-designed muffler system that is specified for the make and model of the respective vehicle/truck or with a muffler system that is equivalent or that exceeds factory specifications.
 3. Exhaust systems shall be properly installed and continually maintained in serviceable condition.
- C. Fire Extinguishers and Tools on Equipment:
 1. While in use, each internal combustion engine, including tractors, trucks, yarders, loaders, welders, generators, stationary engines, or comparable powered equipment shall be provided with at least the following:
 - a. One fire extinguisher, at least 5#ABC with an Underwriters Laboratory (UL) rating of 4A - 40 BC, or greater.

- b. One shovel, sharp, size O or larger, round-pointed with an overall length of at least 48 inches.
 - c. One ax, sharp, double bit 3-1/2#, or one sharp pulaski.
2. Extinguishers, shovels, axes, and pulaskis shall be mounted so as to be readily available from the ground. All tools shall be maintained in a serviceable condition.

END OF SECTION

SECTION 01 40 00

QUALITY CONTROL AND QUALITY ASSURANCE REQUIREMENTS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: administrative and procedural requirements for quality assurance (QA) and quality control (QC).
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve CONTRACTOR of responsibility for compliance with the Contract Document requirements

1.2 DEFINITIONS

- A. Construction Quality Control (CQC): A planned system of inspections that is used to directly monitor and control the quality of a construction project. CQC is normally performed by the material/equipment installer or for natural soil materials by the CONTRACTOR, and is necessary to achieve quality in the constructed or installed system. CQC refers to measures taken by the Installer or CONTRACTOR to determine compliance with the requirements for materials and workmanship as stated in the Contract Documents.
- B. Construction Quality Assurance (CQA): A planned system of activities that provides the OWNER assurance that the facility was constructed as specified in the design. CQA includes inspection, verifications, audits, and evaluations of materials and workmanship necessary to determine and document the quality of the constructed facility.

1.3 GENERAL

- A. Organization and System
 - 1. CONTRACTOR shall provide a CQC organization and system to perform sampling, inspections, test observations, reviews, evaluations and like functions, and retesting in the event of failure of any items of work, including that of subcontractors, to ensure the Work meets requirements of the Contract Documents. CQC shall be established for all Work, except where specific provisions of the Contract Documents provide CQC furnished by OWNER. CONTRACTOR CQC system shall include, but is not limited to; inspections and tests required for specific products and Work indicated in sequence of occurrence under each Specification section and shall cover all Work operations.
 - 2. OWNER shall provide a CQA organization and system to perform sampling, inspections, test observations, reviews, evaluations and like functions, and retesting in the event of failure of any items of Work, including that of subcontractors, to ensure the Work meets requirements of the Contract Documents. CQA shall be established for all Work. The

CQA system shall include, but not limited to, inspections and tests required for specific products, documentation of the daily activities and Work indicated in sequence of occurrence under each Specification section and shall cover all Work operations.

- B. CQC Representative: CONTRACTOR shall provide a quality control representative, supplemented as necessary by additional personnel, who shall be on the Work site at all times during progress, with complete authority to take any action necessary to ensure the Work meets requirements of Contract Documents. CQC representative shall report directly to an officer of CONTRACTOR firm.
- C. CQA Representative: ENGINEER will provide an OWNER's REPRESENTATIVE who shall serve as CQA ENGINEER for the Work.

1.4 CONSTRUCTION QUALITY ASSURANCE PLAN

- A. General: The CONTRACTOR shall comply with the following CQA PLAN, which details procedures, instructions, and reports to be used to ensure the Work meets requirements of Contract Documents.
 - 1. Preparatory Inspection: The preparatory inspection performed by the OWNER and OWNER's REPRESENTATIVE, shall include a review of Contract requirements, an assurance that materials and equipment have been approved, and an assurance that the required control tests will be provided by appropriate parties. This inspection shall also include examination of the Work area. The CONTRACTOR shall be notified at least 24 hours in advance of each preparatory inspection. Preparatory inspections will be conducted by the OWNER and/or OWNER'S REPRESENTATIVE and shall be in accordance with this CQA PLAN.
 - 2. Daily Work Inspections: Inspections shall be performed daily by the OWNER and/or OWNER's REPRESENTATIVE to document continuous Contract compliance, including control tests, throughout the Work. These inspections shall include an examination of workmanship quality, a review of the control tests results for Contract compliance, and a notation as to defective or damaged materials, omissions, and compliance with dimensional requirements. Results of these inspections shall be recorded on the daily summary reports.
 - 3. Completion Inspection: At the completion of the Work, the OWNER and/or OWNER's REPRESENTATIVE shall conduct a completion inspection with the CONTRACTOR. The Work shall be inspected, quality control records shall be reviewed, and a list shall be developed of Work not conforming to Contract Documents. This list shall be included in the CQA documentation with an estimated date for correction of each deficiency. A final inspection shall be made to check that deficiencies have been corrected and the CONTRACTOR notified prior to the specified completion date.

1.5 DOCUMENTATION

- A. Daily Summary Reports: The OWNER's REPRESENTATIVE shall prepare a Daily Summary Report. The Report will include current records, on appropriate

forms, of quality control operations, inspections, and tests performed including the work of suppliers and subcontractors. These records shall include factual evidence that the required inspections or tests have been performed.

- B. Photographs: Photographs may be used to document the progress and acceptability of the work and may be incorporated into the Daily Summary Report, Daily Inspection Report, and the Construction Certification Report. If photographic documentation is used, each photo shall be identified with the date, time and location of photograph along with a brief description of the activities witnessed.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 INSPECTION PROCEDURES

- A. Preparatory Inspection: Preparatory inspection shall be performed by the CONTRACTOR before the beginning of Work and, in addition, before beginning each phase of Work. Preparatory inspection shall include a review of the Contract Documents requirements, review and approval of submittals and similar items, a check to ensure that the required CQC testing will be provided, a physical examination to ensure that the materials and equipment meet final submittals or similar items, and a check to ensure that the required preliminary Work has been completed.
- B. Meeting: CONTRACTOR shall meet with the OWNER and/or OWNER's REPRESENTATIVE to discuss CQC requirements. Purpose of the meeting shall be to develop a mutual understanding relative to details of quality control system, including forms to be used for recording quality control operations, inspections, tests, approvals, certifications, administration of system, and OWNER surveillance.
- C. Test Results: Test results provided shall cite requirements of the Contract Documents, test or analysis procedures used and actual test results, include a statement that item tested or analyzed either meets or fails to meet requirements of the Contract Documents. Test reports shall be signed by a testing laboratory representative authorized to sign certified test reports. CONTRACTOR shall arrange for immediate and direct delivery of signed original of reports, certification and other documentation to OWNER's REPRESENTATIVE.

3.2 CQC SERVICES

- A. Construction quality control testing and verification shall be in accordance with the requirements set forth in applicable Sections of the Contract Documents.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.1 TEMPORARY OFFICES

- A. Temporary offices shall be established at the Site where approved or directed by the OWNER, adequately furnished, and maintained in a clean, orderly condition by the CONTRACTOR. The CONTRACTOR or his authorized representative shall be present in the field office at all times while work is in progress. Instructions received there from the OWNER shall be considered as delivered to the CONTRACTOR.

1.2 TEMPORARY LIGHT AND POWER

- A. CONTRACTOR shall furnish temporary light and power, required to adequately light all work areas and with sufficient power capacity to meet the reasonable needs of all subcontractors. Make all necessary arrangements with the local electric company for temporary electric service, and pay all expenses in connection therewith.

1.3 TEMPORARY HEAT

- A. Provide all heat as may be necessary for thawing out and heating the ground or materials and for proper execution, protection and drying out the Work.

1.4 WEATHER PROTECTION

- A. The CONTRACTOR shall install and maintain temporary heat and enclosures to provide adequate working areas for personnel during the months of November through March.
- B. Temporary heating units shall have been tested and labeled by UL, FM or other recognized association related to the type of fuel being used.

1.5 TEMPORARY SANITARY FACILITIES

- A. The CONTRACTOR shall provide self-contained, single-occupant toilet units of the chemical, aerated recirculation, or combustion type, properly vented and fully enclosed in a fiberglass or other approved non-absorbent shell.

1.6 FIRE EXTINGUISHERS

- A. The CONTRACTOR shall provide portable UL-rated, Class A fire extinguishers for temporary offices and similar spaces. NFPA 10 and 241 will be complied with for classification, extinguishing agent and size required by location and class of fire exposure.

1.7 BARRIERS

- A. Provide as required to prevent public entry to construction areas, to provide for OWNER's use of site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Protect against vehicular traffic, stored materials, dumping, chemically injurious materials, and puddling or continuous running water.

1.8 REMOVAL

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities. Grade site to original contours or as indicated on the Contract Drawings.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 71 23

SURVEYING

PART 1 – GENERAL

1.1 SUMMARY

- A. The CONTRACTOR shall supply all construction and certification surveying services required for the Work.
- B. The ENGINEER will provide to the CONTRACTOR electronic versions and TIN surfaces from the Contract Drawings.
- C. Any disputes that arise in the survey shall be brought to the attention of the OWNER's REPRESENTATIVE immediately and will be resolved in a timely manner.
- D. All surveys shall be conducted by a Wyoming Licensed Land Surveyor and sealed.

1.2 DATUM

- A. The horizontal coordinate system is Wyoming Coordinate System NAD83, West Zone, Distances are ground DAF = 1.0003.
- B. The vertical datum is NAVD29.

1.3 PRIMARY CONTROL

- A. The OWNER has established primary control to be used for establishing work lines and grades. Primary control consists of bench marks and horizontal control points in the Work vicinity as shown and described in the Contract Drawings.
- B. CONTRACTOR shall preserve and maintain primary control points.
- C. If the Work will require the removal of an existing survey control point, the OWNER's REPRESENTATIVE will be notified and the CONTRACTOR will re-establish the control point.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 LAYOUT OF WORK SURVEYS

- A. The CONTRACTOR shall establish lines and grades for work layout as follows:
 - 1. Staking to delineate waste excavation limits.
 - 2. Staking to delineate extent of earthwork for final grade development.
 - 3. Staking to delineate lateral extent of allowable borrow area.
 - 4. Staking to delineate allowable areas and waste fill heights up-canyon for waste relocation and placement.

- B. The CONTRACTOR shall establish measurements required for Work execution to the specified tolerances.
- C. The CONTRACTOR shall provide stakes, markers, and other survey controls necessary to control, check, and guide construction, as outlined in Article 3.1.A of this Section.
- D. The CONTRACTOR shall be responsible for coordinating verification or measurements for planning and executing their own Work and that of any of their subcontractors.

3.2 QUANTITY SURVEYS

- A. The CONTRACTOR shall perform surveys and computations to determine quantities of work performed. The CONTRACTOR shall provide topographic surveys before excavation and before filling waste and/or soil in new areas prior to commencing earthmoving activities. The CONTRACTOR shall provide topographic surveys after completion of excavation and filling waste and/or soil in areas where Work is complete to determine final quantities of work in place.
- B. The OWNER will perform surveys necessary for OWNER's REPRESENTATIVE to verify CONTRACTOR's final quantities of work in place.

3.3 AS-BUILT SURVEYS AND RECORD DRAWINGS

- A. CONTRACTOR shall perform final as-built surveys necessary for OWNER's REPRESENTATIVE to document as-built conditions and to verify that the Work was completed to the lines and grades shown in the Contract Drawings. Record drawings shall include elevations and locations of all portions of the following key components of the Work:
 - 1. Bottom of waste excavation grades
 - 2. Top of finished grade
 - 3. Top of relocated waste grades
 - 4. Top of borrow area grades
 - 5. Centerline of drainage channels, chutes, and culverts
 - 6. Rim and invert elevations of culvert pipes and drainage structures
- B. CONTRACTOR shall notify OWNER's REPRESENTATIVE a minimum of three days in advance of anticipated completion dates for Work that will require as-built record surveying. This will include excavation final surfaces and fill final surfaces.
- C. CONTRACTOR shall maintain a clean, undamaged set of black line prints of the Contract Drawings. The CONTRACTOR shall mark up the set to show the actual location of excavation and fill activities. The CONTRACTOR shall mark whichever drawing is most capable of showing conditions fully and accurately.

3.4 ACCURACY AND TOLERANCES

- A. Degree of Accuracy

1. The accuracy of surveys shall be appropriate to meet the tolerances specified herein and shall be approved by the OWNER's REPRESENTATIVE.
 2. The tolerances for construction, unless otherwise approved by the OWNER's REPRESENTATIVE, shall be as follows:
 - a. Slopes:
 - i. Line: ± 0.5 feet
 - ii. Grade: +0.1 feet, - 0.33 feet
 - b. Floors:
 - i. Line: ± 0.5 feet
 - ii. Grade: +0.1 feet, - 0.33 feet
 - c. Stormwater channels
 - i. Line: ± 0.2 feet
 - ii. Grade: ± 0.1 feet
- B. A record survey will be conducted on areas deemed final by the CONTRACTOR and approved by the OWNER's REPRESENTATIVE. The OWNER's REPRESENTATIVE will notify the CONTRACTOR of compliance with design grades and tolerances. Any areas out of tolerance will be repaired by the CONTRACTOR at no additional cost to the OWNER. Quantities for final payment will be based on this record survey and will be calculated by the CONTRACTOR and verified by the OWNER's REPRESENTATIVE.

3.5 PRESERVATION OF CONTROL POINTS AND STAKES

- A. Control points and stakes lost or damaged during construction, unless previously authorized, shall be reset at the CONTRACTOR's expense.

3.6 MEASUREMENT AND PAYMENT

- A. No direct or separate payment will be made for survey control throughout the duration of the Work. Compensation for all surveying shall be considered incidental to the Work and shall be included in the CONTRACTOR's lump sum and unit prices included in the Contract.

END OF SECTION

SECTION 01 74 19

WASTE MANAGEMENT AND DISPOSAL

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for waste excavation, hauling and placement of waste, monitoring, and management of any special waste or hazardous waste found during excavation
- B. Related sections:
 - 1. Section 01 35 29 – Health, Safety, and Emergency Response Procedures
 - 2. Sections 01 35 43 – Environmental Procedures
 - 3. Section 31 23 00 – Excavation and Fill

1.2 TERMINOLOGY

- A. The following words or terms are not defined but, when used in this Section, have the following meaning:
 - 1. Asbestos-containing Solid Waste – Solid wastes containing greater than 1% by weight asbestos in any of the asbestiform varieties of: chrysotile (serpentine), amosite (cummingtonite, grunerite), crocidolite (riebeckite), anthophyllite, actinolite, or tremolite, and which may be considered friable asbestos (WDEQ Solid Waste Rules and Regulations [SWRR]).
 - 2. Construction and Demolition Waste – Solid waste that includes, but is not limited to, stone, wood, concrete, asphaltic concrete, cinder blocks, brick, plaster, and metal (SWRR).
 - 3. Friable Asbestos Waste – Asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable asbestos after such previously non-friable asbestos becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure (SWRR).
 - 4. Hazardous Waste – Wastes that are defined as hazardous wastes in Wyoming Department of Environmental Quality Hazardous Waste Rules and Regulations (HWRR).
 - 5. Industrial Solid Waste – Solid waste resulting from, or incidental to, any process of industry, manufacturing, mining, or development of any agricultural or natural resources (SWRR).
 - 7. Liquid Waste – Any waste material that is determined to contain “free liquid” as determined by Method 9095 (Paint Filter Liquids Test), described in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods: USEPA Publication SW-846.
 - 8. Municipal Solid Waste (MSW) – Solid waste resulting from or incidental to residential, community, trade, or business activities, including garbage, rubbish, ashes, street sweepings, dead animals, tires, abandoned automobiles, and all other solid waste other than industrial or hazardous waste (SWRR).

9. Nonfriable Asbestos Waste – Any material containing more than 1% asbestos as determined using the polarized light microscopy (PLM) method that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure (USEPA).
10. Petroleum Contaminated Soil (PCS) – Solid waste consisting of any natural or manmade soil or rock material into which petroleum product has been added, excluding hardened asphalt rubble (SWRR).
11. Regulated Medical Waste – A waste or reusable material that contains an infectious substance and is generated in the diagnosis, treatment, or research of humans or animals (49 CFR 173.134).

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall submit an Excavation Work Plan (EWP) to OWNER's REPRESENTATIVE and ENGINEER for approval prior to start of field work.
 1. The EWP shall include, but is not limited to, the following:
 - a. Proposed excavation, hauling, and placement equipment;
 - b. Excavation, waste placement, and excavation backfill sequencing and traffic patterns, including haul road locations and sequencing for MSW, industrial solid waste, construction and debris, and non-friable asbestos;
 - c. Waste screening and hazardous waste and special waste handling procedures;
 - d. Location and details of proposed waste handling and temporary storage facilities for special wastes, hazardous wastes, and any other waste that cannot be landfilled on site;
 - e. Proposed number and work location of trained waste inspectors and field screening devices;
 - f. Identification and qualifications of waste inspectors;
 - g. On-site waste placement and routine cover procedures;
 - g. Daily waste inspection forms to be submitted by the CONTRACTOR;
 - h. Daily waste transportation summary forms to be submitted by the CONTRACTOR;
 - i. Manufacturer's specifications for impervious containers to be used (drums, roll-offs, lined containment, etc.);
 - j. Equipment decontamination procedures (as needed); and
 - k. Proposed methods for maintaining exclusion zones during excavation.
 2. The EWP shall also address:
 - a. Methods for providing access into excavations for the CONTRACTOR, the OWNER's REPRESENTATIVE, and regulatory personnel;
 - b. Routing of haul vehicles (for waste, soil and clean backfill);
 - c. The proposed construction schedule, including anticipated excavation rates as well as an initial notification of estimated inspection needs; and

- d. Waste handling protocols and temporary storage areas for hazardous wastes (fluid-filled drums, lead-base-paint containing material, etc.) or special waste (friable asbestos waste, and PCS). This shall include a discussion of the plan to manifest, haul, and dispose of hazardous waste, friable asbestos, PCS, or other waste category not allowed for disposal at the site.
- C. A Health and Safety Plan (HASP) shall be submitted by the CONTRACTOR for approval by the OWNER's REPRESENTATIVE and ENGINEER pursuant to Section 01 35 29 – Health, Safety, and Emergency Response Procedures. The HASP must be approved prior to start of the Work.
- D. The CONTRACTOR shall discuss with the OWNER's REPRESENTATIVE the proposed methods of construction, including topsoil stripping, excavation, hauling, waste placement, and filling for the various portions of the Work. The review shall be for method only. The CONTRACTOR shall remain responsible for the adequacy and safety of the methods.
- E. The CONTRACTOR shall notify the OWNER's REPRESENTATIVE in writing at least seven days in advance of his/her intention to perform the Work of this Section. If the Work is interrupted for reasons other than inclement weather, the CONTRACTOR shall notify the OWNER's REPRESENTATIVE immediately and provide a plan and schedule for resumption of the work.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. General fill cover soils used to cover waste after placement on Site shall be on-Site clean soils derived from the excavation and/or other on-Site borrow area that consists of natural soils that are free of debris and foreign objects in accordance with the requirements of Section 31 23 00 – Excavation and Fill.

PART 3 – EXECUTION

3.1 SPECIAL WASTE STORAGE AND CONTAINMENT AREA

- A. A temporary waste storage area shall be established in accordance with Resource Conservation and Recovery Act (RCRA) requirements prior to the excavation of waste material. The size of the storage area may be adjusted as necessitated by the volumes of potentially hazardous and/or special wastes encountered at the Site. Provisions shall be made by the CONTRACTOR to have these facilities in place prior to waste excavation so applicable wastes can be stored as they are encountered without impact to project schedule. Prospective locations of temporary waste storage areas shall be determined by the CONTRACTOR and approved by the OWNER's REPRESENTATIVE prior to start of construction; these areas shall be located away from drainage flow paths such as ditches and streams. These areas should be within the area of allowable CONTRACTOR disturbance as shown on the Contract Drawings unless otherwise approved by the OWNER's REPRESENTATIVE.

1. Temporary storage areas shall be constructed by berming the perimeter of the selected area using soil, then covering the bermed area with a plastic liner (40-mil HDPE or OWNER-approved equivalent).
2. Each batch of waste shall be labeled with the date of its excavation and the approximate location in which it was found. After the waste is placed in the bermed area, it shall be covered with plastic sheeting to minimize collection of rainwater.
3. When a batch of waste has been determined to be hazardous, it can remain on site no longer than 90 days. Therefore, any treatment, sampling, and analysis must be completed prior to that 90-day deadline, and each batch must be labeled with the date at which it was determined to be hazardous.
4. Required management practices for temporary waste storage areas include the following:
 - a. Clearly demarcate and post these areas using legible signs, barricades, fences, or other appropriate means to restrict access.
 - b. Maintain good run-on/runoff control within these areas.
 - c. Regularly inspect these areas for leaks and spills.
 - d. Implement best management practices when storing, handling, and transferring wastes, with emphasis on spill prevention and cleanup, stormwater/erosion control, and dust management.

3.2 EXCAVATION OF WASTE

- A. Safe temporary construction slopes shall be the responsibility of CONTRACTOR. CONTRACTOR shall inspect all temporary and permanent open-cut excavations and material stockpiles on a regular basis for signs of instability. Should signs of instability be noted, CONTRACTOR shall immediately undertake remedial measures and shall notify CQA ENGINEER immediately. Permanent cut slopes shall be left in smooth, safe, and stable condition at the end of the workday.
- B. CONTRACTOR shall provide all equipment and facilities and perform pumping as necessary to keep Work areas dry of surface water pursuant to Sections 01 35 43 – Environmental Procedures and 31 23 00 – Excavation and Fill.
- C. Waste materials to be removed from excavation limits shown in the Contract Drawings shall be excavated in accordance with this Section and pertinent regulatory requirements, as summarized in Part 1.2 of this Section. The CONTRACTOR shall begin excavating in areas where previous investigations (subsurface investigations or geophysics) have indicated high likelihood of subsurface waste and then progress both laterally and vertically until no further wastes are encountered based on visual observations. If an excavation has progressed into native soil, then that excavation may be terminated unless further excavation is required to meet design grades.
- D. The means and methods for excavation will be selected by the CONTRACTOR.

- E. Excavations shall generally proceed in a manner so as to minimize stormwater contact with exposed waste. Temporary diversions (i.e., berms or ditches) shall be constructed to divert run-on from entering active Work areas or other waste areas.
- F. Temporary haul roads shall be established across the area of the excavation by the CONTRACTOR to facilitate a circular traffic pattern through the Work area while minimizing impacts on Site operations and public access.
- G. Landfill excavation quantities shall be determined based on surveying performed by the CONTRACTOR and approved by the OWNER's REPRESENTATIVE before and after the excavation activities are performed, as detailed in Sections 01 22 13 – Measurement and Payment and 01 71 23 – Surveying. Visual inspection reports and survey reports, including cross sections or grade stake measurements, shall be the primary means of documenting the removal of waste materials. Excavations shall not be backfilled until inspection by the CONTRACTOR and OWNER's REPRESENTATIVE, and the results have been accepted by the OWNER.
- H. Prior to start of field work, the CONTRACTOR shall provide a construction schedule that includes anticipated excavation rates as well as an initial notification of estimated inspection needs. At least one business day before having an excavation area ready for inspection, the CONTRACTOR shall provide the OWNER's REPRESENTATIVE with written notice that the area is ready for inspection.
- I. Waste removal shall be performed in the landfill excavations until the following criteria are met:
 - 1. All visually observable waste has been removed; and
 - 2. Native soils are encountered. In the event that the disposal trench or area was formed with compacted berms, the excavation of the sidewalls shall continue until the presence of the compacted soil berms is confirmed and documented.
- J. As waste is being excavated, it shall be visually inspected by the CONTRACTOR. The OWNER's REPRESENTATIVE shall provide oversight of waste inspection. The CONTRACTOR shall provide a full-time waste inspector that meets the following training and experience requirements:
 - 1. Hazardous Waste Operations and Emergency Response training in accordance with 29 CFR 1910.120; and
 - 2. At least two years of applicable experience.
- K. Based upon the results of the CONTRACTOR inspections, waste may be selected for special handling as described in Part 3.4 of this Section. Waste selected for special handling (special waste including friable asbestos waste and PCS waste), nonhazardous liquid waste, regulated medical waste, hazardous waste, and any other waste prohibited from disposal at the Site shall be taken to temporary waste storage areas for possible additional characterization, processing prior to disposal, or directly loaded for transportation as long as the requirements of this Section are met. Wastes that do not require special handling (e.g., MSW, industrial solid waste, construction and debris and non-friable asbestos) shall be loaded directly into trucks for hauling and placement at the

designated areas of the Site. Nonhazardous liquid waste may be augmented with solid material until a passing paint filter test is obtained and landfilled on site.

3.3 WASTE CHARACTERIZATION

- A. Waste inspection and sampling and laboratory analysis (if necessary) shall be conducted by the CONTRACTOR to allow appropriate waste manifesting and disposal in accordance with state and federal regulations. Waste manifests shall be prepared by the CONTRACTOR and signed by the OWNER'S REPRESENTATIVE, as required.
- B. The physical characteristics of the waste shall be evaluated through on-site observation and waste screening conducted by trained CONTRACTOR personnel. It is the sole responsibility of the CONTRACTOR to ensure wastes are disposed of in accordance with the applicable regulations and laws. Waste inspectors shall be present at each active excavation. Based on these inspections, the CONTRACTOR shall submit waste inspection forms to the OWNER'S REPRESENTATIVE on a daily basis. Selection of waste for special handling shall be based on the results of the waste inspection and the following criteria.
 - 1. MSW, industrial solid waste, construction and debris waste and non-friable asbestos waste shall be loaded directly into trucks for hauling and placement up-canyon at designated areas within the landfill limits
 - 2. Friable asbestos waste shall be tightly sealed in structurally rigid, leak-tight containers, enclosing single, six-mil-thick plastic bags for shipment to an approved off-site facility. Structurally rigid containers include those containers that can withstand pressures of 250 psi.
 - 3. Nonhazardous liquid waste may be mixed with soil or other ENGINEER-approved amendments to pass the paint filter test and then landfilled on Site in the designated up-canyon waste placement areas.
 - 4. PCS waste shall be stored at the temporary storage facility, and analyzed and manifested as necessary for shipment and disposal at an approved disposal site.
 - 5. Regulated medical waste shall be stored at the temporary storage facility, and analyzed and manifested as necessary for shipment and disposal at an approved disposal facility.
 - 6. Hazardous waste shall be directed to on-site waste storage areas for subsequent testing and manifested for shipment and disposal at an approved disposal facility.
- C. In the event there is a discrepancy in waste disposition between the CONTRACTOR and the OWNER'S REPRESENTATIVE, the discrepancy shall be immediately brought to the OWNER for resolution. Depending on the type of waste, the sampling and analysis program may include any of the following:
 - 1. Chemical composition analysis;
 - 2. TCLP testing;
 - 3. Paint filter liquids testing; and
 - 4. Reactivity, corrosivity, and ignitability testing.

3.4 WASTE HAULING AND PLACEMENT

- A. Excavated MSW will be hauled to designated placement areas within landfill limits for placement and placed within the allowable lateral disposal limits such that the maximum waste placement elevations are not exceeded;
- B. MSW will be placed and compacted with on-site equipment, to the satisfaction of the CQA ENGINEER;
- C. MSW shall be hauled so that MSW is not dispersed prior to placement at the designated placement area;
- D. MSW placed each day shall be covered with a minimum of six inches of general fill material.

3.5 HANDLING SPECIAL WASTE

- A. Special care shall be exercised in areas identified by the CONTRACTOR as potentially containing special waste or hazardous waste. The following process is intended to ensure that special wastes and hazardous waste are handled appropriately, with minimal disruption to the project schedule.
 - 1. Notify the OWNER's REPRESENTATIVE immediately upon discovery of a special waste or hazardous waste.
 - 2. Where appropriate, demarcate the area to restrict access to the area. Note visual observations (physical characteristics, labels on containers, etc.) and determine appropriate PPE.
 - 3. Special wastes and hazardous waste shall be immediately containerized and stored in accordance with Article 3.1 of this Section until characterization of the waste is complete. These materials shall be contained in drums, overpacks, or Hazmat roll-offs used to ship special or hazardous waste.
 - a. Material near leaking drums with high volatile organic compound (VOC) readings shall be segregated.
 - b. All drums containing unknown materials shall be placed in overpack drums to stabilize the contents, and the filled overpack drums shall be moved to a designated drum storage area for further characterization.
- B. Representative samples shall be obtained by following the sampling methods specified in the RCRA Waste Sampling Technical Guidance document (August 2002). Chain-of-custody forms shall be used with each sample collected. The chain of custody shall include information about the sample size, container, required testing, date and time of sample collection, name of sampling personnel, name of waste generator, identification of waste (i.e., contaminated soil, drum liquid, etc.), and signature of person sampling and person accepting custody of sample for analysis.
- C. Trucks, roll-offs, drums, and other containers may be used to store and/or transport wastes from the Site to appropriate disposal facilities.

3.6 SURVEY CONTROL

- A. Surveying of the MSW excavation areas and the MSW fill areas shall be performed by the CONTRACTOR prior to and following MSW excavation and placement

operations in that area to verify quantities for payment purposes in accordance with Sections 01 22 13 – Measurement and Payment and 01 71 23 – Surveying.

END OF SECTION

SECTION 01 77 00

PROJECT CLOSE-OUT AND PROCEDURES

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for project close-out, including but not limited to:
1. Substantial Completion.
 2. Final Acceptance.
 3. Final Adjustments of Accounts.
 4. Final Payment.

1.2 SUBSTANTIAL COMPLETION

- A. **CONTRACTOR:** Prior to requesting the OWNER's inspection for letter of Substantial Completion in accordance with the Contract Documents, comply with the following requirements to the OWNER's satisfaction.
1. Provide written confirmation that the following will be submitted to the OWNER within 15 days of the date of Substantial Completion:
 - a. All guarantees, warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
 - b. Project record documents, maintenance and operating manuals and similar record information for Work as described in these Contract Documents.
 2. Discontinue (or change) and remove from the Work site temporary facilities, mock-ups, and similar elements. Complete refurbishing of permanent mechanical and similar services used for temporary services or facilities.
 3. Complete the final cleaning of the Work site as required.
 4. Touch up and otherwise repair and restore any said damages to Project area to the OWNER's satisfaction.
- B. **Status Inspection:** Within reasonable time after receipt of such notice, OWNER will make an inspection to determine the status of completion.
- C. **Complete:** When OWNER determines the Work or designated portion of the Work is substantially complete, OWNER will:
1. Prepare a letter of substantial completion containing:
 - a. Date of substantial completion.
 - b. CONTRACTOR list of items to be completed or corrected as verified by OWNER.
 - c. Time within which the CONTRACTOR shall complete or correct work of listed items.
 2. Submit letter of Substantial Completion to the CONTRACTOR for his written acceptance of responsibilities assigned to him in the letter.

- D. Not Complete: Should the OWNER determine the Work or designated portion of the Work is not substantially complete:
1. OWNER will, within 7 days, notify CONTRACTOR, in writing, stating reasons.
 2. CONTRACTOR shall remedy deficiencies in the Work and send a second written Notice of Substantial Completion to OWNER.
 3. OWNER will re-inspect the Work.

1.3 FINAL ACCEPTANCE

- A. CONTRACTOR: Prior to requesting the OWNER for Certification of Final Acceptance, as required by the Contract Documents, the CONTRACTOR shall submit written certification that:
1. Contract Documents and drawings have been reviewed.
 2. Work has been completed in accordance with Contract Documents and drawings.
 3. Work has been inspected for compliance with the Contract Documents and drawings.
 4. Deficiencies in the Work indicated by the final punch-list have been completed or otherwise resolved for acceptance and endorsed and dated by the OWNER.
 5. Project record documents, maintenance and operating manuals and similar record information as described in these Contract Documents have been submitted and reviewed by the OWNER.
 6. Photocopy evidence of each general and specialty permit and formal approval obtained for performing the Work as required by Contract Documents.
 7. Final cleaning of the Work site, as required, has been completed and meets with OWNER's approval.

1.4 FINAL ADJUSTMENT OF ACCOUNTS

- A. CONTRACTOR: Submit final statement of account to OWNER.
- B. Submittal: Final statement of account shall reflect all adjustments in Contract Sum:
1. Original Contract Sum.
 2. Additions and deductions resulting from the following or as applicable:
 - a. Previous change orders.
 - b. Unit prices, as applicable.
 - c. Deductions for uncorrected Work.
 - d. Deductions for reinspection costs.
 - e. Deductions for liquidated damages.
 - f. Other adjustments.
 3. Total Contract Sum, as adjusted.
 4. Previous payments.
 5. Contract Sum remaining due.
- C. Final Change Order: OWNER will prepare final change order, reflecting accepted adjustments to Contract Sum not previously made by change orders and make final application in accordance with requirements of Conditions of the Contract.

1.5 FINAL PAYMENT

- A. Final Certificate: OWNER will issue final change order, reflecting accepted adjustments to Contract Sum not previously made by change orders and make final application in accordance with requirements of Conditions of the Contract. CONTRACTOR shall provide Record Drawings, Consent of Surety, Release of Liens and Labor Standards Certification prior to issuance of final payment.
- B. Delay: Should final completion be materially delayed through no fault of CONTRACTOR, OWNER may issue a semi-final Certificate of Payment, in accordance with the applicable provision of Conditions of the Contract.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

DIVISION 03 – CONCRETE

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for cast-in place concrete.
- B. The CONTRACTOR shall test and/or monitor concrete materials and operations and inspect as the Work progresses. Failure to detect any defective work or material shall not in any way prevent later rejection when such defect is discovered, nor shall it obligate the OWNER for final acceptance or relieve the CONTRACTOR of the responsibility to provide concrete meeting the requirements of this Section.

1.2 REFERENCES

- A. Standards referenced in this Section are listed below:
 - 1. American Concrete Institute, (ACI):
 - a. ACI 211.1, Standard Practice to Selecting Proportions for Concrete
 - b. ACI 301, Specifications for Structural Concrete.
 - c. ACI 304, Guide for Measuring, Mixing, Transporting, and Placing Concrete.
 - d. ACI 305, Hot Weather Concreting.
 - e. ACI 306, Cold Weather Concreting.
 - f. ACI 309, Guide for Consolidation of Concrete
 - g. ACI 318, Building Code Requirements for Structural Steel
 - h. ACI 347, Guide to Formwork for Concrete.
 - 2. American Society for Testing and Materials, (ASTM):
 - a. ASTM A82, Specification for Steel Wire, Plain, for Concrete Reinforcement.
 - b. ASTM A615, Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
 - c. ASTM C33, Specification for Concrete Aggregates.
 - d. ASTM C39, Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - e. ASTM C94, Specification for Ready-Mixed Concrete.
 - f. ASTM C143, Test Method for Slump of Hydraulic Cement Concrete.
 - g. ASTM C150, Specification for Portland Cement.
 - h. ASTM C172, Practice for Sampling Freshly Mixed Concrete.
 - i. ASTM C231, Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
 - 3. Concrete Reinforcing Steel Institute (CRSI):
 - a. MSP, Manual of Standard Practice

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. Design Mixtures: Submit concrete mixture design, including the following:
 - 1. Slump on which the mix design is based.
 - 2. Total gallons of water per cubic yard.
 - 3. Brand, type, composition and quantity of cement.
 - 4. Specific gravity and gradation of each aggregate.
 - 5. Ratio of fine to total aggregates.
 - 6. Weight (surface dry) of each aggregate per cubic yard.
 - 7. Brand, type, ASTM designation, active chemical ingredients and quantity of each admixture.
 - 8. Compressive strength, based on 28-day compression tests.
 - 9. Time of initial set.
 - 10. Entrained air content.
 - 11. Amount of mixing water to be withheld for later addition at Project site.

Design mixture data shall be submitted 21 days prior to use. Design mixtures must be proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.

- C. Laboratory Test Reports: CONTRACTOR shall submit copies of laboratory and field test reports for quality assurance testing.
- D. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

1.3 QUALITY ASSURANCE

- A. CONTRACTOR shall employ, at their own expense, an independent testing laboratory experienced in design and testing of concrete materials and mixes to perform material evaluation tests and to design concrete mixes. The same laboratory shall not be employed to both design concrete mixes and provide field testing.
- B. Certificates, signed by concrete producer and CONTRACTOR, may be submitted in lieu of material testing, when acceptable to CQA ENGINEER in writing.
- C. Installer qualifications: Project personnel must be qualified as ACI-certified Flatwork Technicians and Finishers.
- D. Concrete testing service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.
 - 1. Slump, air content, and temperature tests shall be made daily at the time of placement and as often as is necessary for control checks

2. Cylinders shall be at collected for laboratory strength testing at a frequency of one set for each 100 cubic yards, or fraction thereof.

PART 2 – PRODUCTS

2.1 CONCRETE MATERIALS

- A. Portland Cement: ASTM C150, Type II.
- B. Aggregates: ASTM C33.
 1. Fine aggregate: Clean, sharp, natural sand-free from loam, clay, lumps, or other deleterious substances. Dune sand, bank run sand, and manufactured sand are not acceptable.
 2. Coarse aggregate: Clean, uncoated, processed aggregate containing no clay, mud, loam, or foreign matter, as follows:
 - a. Crushed stone, processed from natural rock or stone.
 - b. Washed gravel, either natural or crushed. Use of slag and pit or bank run gravel is not permitted.
- C. Coarse aggregate size: ASTM C33, No. 67, unless permitted otherwise by CQA ENGINEER.
- D. Water: clean, potable.
- E. Formwork: CONTRACTOR to design and furnish suitable and adequate forms conforming to shapes, lines, elevations, and dimensions of concrete on drawings using ACI 347 as a guide.
- F. Curing: ACI 308, "Recommended Practice for Curing Concrete."

2.2 CONCRETE MIX

- A. Mix Designs: Provide ready mixed concrete for all concrete required in the Contract Drawings. Batch, mix and transport ready mixed concrete in accordance with ASTM C94. Plant, equipment and facilities shall conform to "Check List for Certification of Ready Mixed Concrete Production Facilities" of the National Ready Mixed Concrete Association.
- B. Cast-In-Place Concrete:
 1. Concrete shall have a minimum 28-day compressive strength of 3,500 psi, unless otherwise approved by OWNER.
 2. The maximum aggregate size shall be 3/4 inches.
 3. The concrete shall be composed of cement, fine aggregate, coarse aggregate and water.
 4. The concrete shall be homogeneous, readily placeable, uniformly workable, and shall be proportioned in accordance with ACI 211.1.
 5. Proportions shall be established on the basis of field experience with the materials to be employed.
- C. Qualities Required:

TABLE 03 30 00-1
CONCRETE QUALITY REQUIREMENTS

Item	Quality Required	Reference
Class	A	ACI 347
Type of Cement	II	ASTM C150
Compressive Strength (f _c) @ 28 days	3,500 psi	ASTM C39
Slump	Maximum 4 inches	ASTM C143
Air Content	6.5 ± 1.5 percent by volume	ASTM C231

- D. Rate of Hardening: Concrete mix shall be adjusted to produce the required rate of hardening for varied climatic conditions.

2.3 FORM MATERIALS

- A. Provide form materials with sufficient stability to withstand pressure of placed concrete without bow or deflection. CONTRACTOR shall be responsible for design of the formwork system to resist all applied loads including pressures from fluid concrete and construction loads.
- B. Smooth form surfaces: Acceptable panel-type to provide continuous, straight, smooth, as-cast surfaces as required by ACI 301.
- C. Provide ¼-inch chamfer at all external corners.
- D. Form ties:
1. Provide factory-fabricated, removable or snapoff metal form ties, designed to prevent form deflection, and to prevent spalling of concrete surfaces upon removal. Materials used for tying forms will be subject to approval of CQA ENGINEER.
 2. Unless otherwise shown, provide ties so that portion remaining within concrete after removal of exterior parts is at least 1.5-inches from the outer concrete surface. Unless otherwise shown, provide form ties that will leave a uniform, circular hole no larger than 1-inch diameter in the concrete surface when removed.

2.4 REINFORCING MATERIALS

- A. Reinforcing bars: ASTM A615, Grade 60 deformed bars.
- B. Steel wire: ASTM A82.
- C. Provide supports for reinforcement including bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcement in place.

PART 3 – EXECUTION

3.1 INSPECTION

- A. CONTRACTOR shall examine the subgrade and the conditions under which the Work is to be performed and notify CQA ENGINEER, in writing, of unsatisfactory conditions. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to CQA ENGINEER.

3.2 FORMWORK

- A. Construct formwork in accordance with ACI 347 such that concrete members and structures are of correct size, shape, alignment, elevation and position. Construct forms tight enough to prevent loss of concrete mortar.
- B. Provide openings in formwork to accommodate the Work of other trades. Accurately place and securely support items required to be built into formwork.
- C. Clean and adjust forms prior to concrete placement. Apply form release agents or wet forms, as required. Re-tighten forms during and after concrete placement, if required, to eliminate cement paste leaks.
- D. Removal of formwork:
 - 1. Conform to the requirements of ACI 301 and ACI 347, except as otherwise specified.
 - 2. Formwork or shoring shall not be removed until supported concrete members have acquired a minimum of 90% of specified compressive strength. Results of suitable quality control tests of field cured specimens may be submitted to CQA ENGINEER for review as evidence that concrete has attained sufficient strength for removal of supporting formwork and shoring prior to removal times indicated herein.
 - 3. Removal time for all formwork will be subject to approval of CQA ENGINEER.
 - 4. Form tie holes shall be repaired following the requirements of ACI 301.

3.3 REINFORCEMENT, JOINTS, AND EMBEDDED ITEMS

- A. Comply with the applicable recommendations of specified codes and standards, and CRSI "Manual of Standard Practice," for details and methods of reinforcement placement and support.
- B. Clean reinforcement to remove loose rust and mill scale, earth, ice, and other materials which act to reduce or destroy bond with concrete.
- C. Position, support, and secure reinforcement against displacement during formwork construction or concrete placement. Locate and support reinforcing by means of metal chairs, runners, bolsters, spacers, and hangers, as required.
 - 1. Place reinforcement to obtain the minimum concrete coverages as shown in the Contract Drawings and as specified in ACI 318. Arrange, space, and securely tie bars and bar supports together with 16 gauge wire to hold reinforcement accurately in position during concrete placement operations. Set with ties so that twisted ends are directed away from exposed concrete surfaces.

2. Reinforcement shall not be secured to formwork with wire, nails or other ferrous metal. Metal supports subject to corrosion shall not be in contact with formed or exposed concrete surfaces.
- D. Provide sufficient numbers of supports of strength required to carry reinforcement. Do not place reinforcement more than two inches beyond the last leg of any continuous bar support. Do not use supports as bases for runways for concrete conveying equipment and similar construction loads.
 - E. Splices: Provide standard reinforcement splices by lapping ends, placing bars in contact, and tying tightly with wire. Comply with requirements shown for minimum lap of spliced bars in accordance with the requirements of ACI.
 - F. Concrete shall not be placed until the reinforcement is inspected and permission for placing concrete is granted by CQA ENGINEER. All concrete placed in violation of this provision will be rejected. CONTRACTOR shall notify CQA ENGINEER, in writing, a minimum of two working days prior to proposed concrete placement.

3.4 CONCRETE PLACEMENT

- A. Job site mixing: Use drum type batch machine mixer, mixing not less than 1½ minutes for 1 cubic yard or smaller capacity. Increase mixing time a minimum of 15 seconds for each additional cubic yard or fraction thereof.
- B. Ready-mixed concrete: Comply with the requirements of ASTM C94.
 1. When air temperature is between 85 and 90°F, reduce mixing and delivery time from 1½ hours to 75 minutes
 2. When air temperature is above 90°F, reduce mixing and delivery time to 60 minutes
- C. Concrete placement:
 1. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
 2. Place concrete in a continuous operation within planned joints or sections complying with the requirements of ACI 304.
 2. Do not begin placement until the work of other trades affecting concrete is completed.
 3. Wet concrete and subgrade surfaces to a saturated surface dry condition immediately prior to placement of concrete.
 4. Deposit concrete as near its final location as practical to avoid segregation due to re-handling or flowing.
 5. Take care to avoid separation of the concrete mixture during transportation and placement. Concrete shall not be permitted to free fall for a distance greater than four feet during placement.
 6. Concrete placement shall be completed within 90 minutes of the addition of water to the dry ingredients.
- D. Consolidate placed concrete in accordance with ACI 309 using mechanical vibrating equipment supplemented with hand rodding and tamping, such that

concrete is worked around reinforcement and other embedded items and into all parts of formwork. Insert and withdraw vibrators vertically at uniformly spaced locations. Do not use vibrators to transport concrete within the formwork. Vibration of formwork or reinforcement shall not be permitted.

- E. Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placement, and curing.
 - 1. In hot weather comply with the requirements of ACI 305.
 - 2. In cold weather comply with the requirements of ACI 306.

3.5 QUALITY OF CONCRETE WORK

- A. Make all concrete solid, compact, smooth, and free of laitance, cracks, and cold joints.
- B. Cut out and properly replace to the extent directed by CQA ENGINEER, or repair to the satisfaction of CQA ENGINEER, surfaces which contain cracks or voids, are unduly rough or are in any way defective. Patches or plastering will not be acceptable.
- C. Repair, removal, and replacement of defective concrete as directed by CQA ENGINEER shall be at no additional cost to OWNER.

3.6 FINISHING

- A. Non-formed surfaces:
 - 1. All non-formed surfaces shall be screeded to the specified elevation, tamped with a grid tamper until a thin layer of grout forms on the surface, and floated with either a hand or power float to finished grade such that the surface shall conform to the line and grade desired when properly consolidated.
 - 2. The finished surface shall be free from porous spots, irregularities, depressions, and small pockets or rough spots such as may be caused by accidental disturbance or by particles of coarse aggregate embedded near the surface.
 - 3. All contraction and expansion joints in the completed work shall be left carefully tooled and free of all mortar and concrete.
 - 4. Sawed joints shall be made less than 24 hours after placement of concrete or as determined by the CONTRACTOR.
- B. Formed surfaces:
 - 1. Immediately following the removal of forms, all fins and irregular projections shall be removed from all surfaces that are to be exposed. On all surfaces, cavities produced by form ties, honeycomb spots, broken corners, or edges and other defects shall be thoroughly cleaned and, after having been kept saturated with water for a period of not less than three hours, shall be carefully pointed and trued with a mortar of cement and fine aggregate mixed in the proportions used in the concrete being finished. Mortar used in pointing shall not be more than one hour old. The mortar patches shall be cured in the same manner as required for concrete.

3.7 CURING

- A. Begin initial curing as soon as free water has disappeared from exposed surfaces. Where possible, keep continuously moist for not less than 72 hours. Continue curing by use of moisture-retaining cover or membrane-forming curing compound. Cure formed surfaces by moist curing until formwork is removed. Provide protection, as required, to prevent damage to exposed concrete surfaces. The total curing period shall not be less than seven days. Curing methods and materials shall be compatible with scheduled finishes.

3.8 CLEANING AND DISPOSAL

- A. All materials and debris resulting from construction shall be removed from the Site and properly disposed.

** END OF SECTION **

DIVISION 31 – EARTHWORK

SECTION 31 05 19.13

GEOTEXTILES FOR EARTHWORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Section includes: general requirements for the manufacture, supply, installation, and quality control (QC) of geotextile fabric associated with the Work.

1.2 REFERENCES

- A. Standards referenced in this Section are:
1. ASTM D3786 – Standard Text Method for Hydraulic Bursting Strength of Knitted Goods and Non-woven Fabrics: Diaphragm Bursting Strength Test Method
 2. ASTM D4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity
 3. ASTM D4533 – Standard Test Method for Trapezoid Testing Strength of Geotextiles
 4. ASTM D4632 – Standard Test Method for Breaking Load and Elongation of Geotextiles (Grab Method)
 5. ASTM D4751 – Standard Test Method for Determining Apparent Opening Size of a Geotextile
 6. ASTM D4833 – Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
 7. ASTM D5199 – Standard Test Method for Measuring Geotextiles
 8. ASTM D5261 – Standard Test Method for Measuring Mass Per Unit Area of Geotextiles

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. The CONTRACTOR shall provide the following information after Contract award, but no later than 14 days prior to material arrival on-site:
1. Written certification that the geotextile to be used meets the requirements of the Project.
 2. Certificates of origin and the manufacturer of the resin
 3. A copy of the manufacturer's geotextile QC test results of properties outlined in Part 2 of this Section. The CQA MANAGER reserves the right to refuse use of any geotextile supplied without the proper QC documentation.
 4. A detailed list of performance criteria for the geotextile material being produced for the Project. Refer to Part 2 of this Section for geotextile properties and test methods.

1.4 QUALITY ASSURANCE

- A. CONTRACTOR shall ensure that geotextile Manufacturer has an internal product QC program that meets Contract requirements.
- B. CONTRACTOR shall provide required QC information at least 14 days prior to geotextile being shipped to the Site for review and approval by the OWNER's REPRESENTATIVE. CONTRACTOR shall also assure that the geotextile is delivered to the site at least five calendar days prior to installation.
- C. Geotextile rolls that do not meet the requirements of this Section and the Manufacturer's QC program shall be rejected. CONTRACTOR shall be required to replace the rejected material with new material that complies with the specifications.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Packing and shipping:
 - 1. Geotextile fabric shall be supplied in rolls wrapped in relatively impermeable and opaque protective covers, with straps for unloading.
 - 2. Geotextile rolls shall be marked or tagged with the following information:
 - a. Manufacturer's name
 - b. Product information
 - c. Roll number
 - d. Batch or lot number
 - e. Roll dimensions
 - 3. The CONTRACTOR shall ensure that geotextile rolls are properly loaded and secured to prevent damage during transit.
 - 4. The CONTRACTOR shall protect geotextile from excessive heat, puncture, cutting, or other damaging or deleterious conditions during shipping and delivery.
 - 5. The CONTRACTOR shall ensure personnel responsible for loading and transport are familiar with handling and transport constraints imposed by Manufacturer and as required by this Section.
 - 6. The CONTRACTOR shall ensure personnel responsible for unloading and storing materials on-site are familiar with handling and transport constraints imposed by Manufacturer and as required by this Section.
- B. Acceptance at the Site:
 - 1. The CQA ENGINEER shall perform inventory and surface inspection for defects and damage of all geotextile rolls upon delivery.
 - 2. The CONTRACTOR shall unroll and allow for the CQA ENGINEER inspection of any geotextile roll that may be damaged below surface layers.
 - 3. The CONTRACTOR shall repair damage resulting from handling and transport of geotextile to Site at no cost to OWNER. If irreparable, in the opinion of CQA ENGINEER, damaged materials shall be replaced at no cost to OWNER.
- C. Storage and protection:
 - 1. OWNER shall provide on-site storage area for geotextile rolls from time of delivery until installation.

2. The offloading and storage of the materials is the responsibility of the CONTRACTOR from the time the materials are off-loaded and inspected by the CQA ENGINEER until the time the completed installation is accepted. CONTRACTOR is also responsible for preparing the storage location off the ground and for the protection of the material from the elements (e.g., ultraviolet light, moisture, temperature, etc.).
3. After CONTRACTOR has removed material from storage area, CONTRACTOR shall protect geotextile from puncture, dirt, groundwater, moisture, mud, mechanical abrasion, excessive heat, ultraviolet light exposure, and other sources of damage.
4. Geotextile rolls shall be stored in relatively opaque and water tight wrappings.
5. CONTRACTOR shall preserve integrity and readability of the geotextile roll labels, and store such that CQA ENGINEER shall have access to the package slips or roll labels for each roll to verify roll acceptance.

PART 2 - PRODUCTS

2.1 GEOTEXTILE FABRIC

- A. The geotextile fabric shall be non-woven, needle punched, and shall be composed of 95% polypropylene or polyester fibers by weight. Rolls shall be free of holes, contamination, and foreign matter. The geotextile for the project shall meet or exceed the minimum (unless noted otherwise) roll values shown in Table 31 05 19.13-1 below:

TABLE 31 05 19.13-1
GEOTEXTILE FABRIC PERFORMANCE REQUIREMENTS

Fabric Property	ASTM Test Method	Unit	Minimum Value
Mass Per Unit Area	D5261	oz/sy	12
Trapezoidal Tear Strength	D4533	lbs	115
Grab Strength	D4632	lbs	300
Mullen Burst Strength	D3786	psi	650
Puncture Resistance	D4833	lbs	195
Permittivity	D4491	s ⁻¹	0.90
AOS	D4751	mm	0.150

PART 3 – EXECUTION

3.1 INSPECTION

- A. CONTRACTOR shall verify the elevations and observe the conditions under which the WORK is to be performed. Do not proceed with the WORK until unsatisfactory conditions have been corrected in a manner acceptable to the CQA ENGINEER.
- B. CONTRACTOR shall review installation procedures under other Sections and coordinate the installation of items that must be installed prior to and/or with the geotextile fabric.

3.2 INSTALLATION

- A. CONTRACTOR shall place geotextile fabric according to Manufacturer's recommendations.
- B. Geotextile seams shall be secured in accordance with Manufacturer's recommendations or as approved by CQA ENGINEER. Geotextile seams shall be overlapped a minimum of 12 inches.
- C. The CONTRACTOR shall examine the entire geotextile surface after installation to ensure, to the satisfaction of the CQA ENGINEER that no potentially harmful foreign objects are present. Such foreign objects shall be removed and damaged geotextile shall be repaired or replaced by the CONTRACTOR at no cost to OWNER.
- D. CONTRACTOR shall use care not to damage underlying materials during installation.
- E. CONTRACTOR shall prevent the geotextile from accumulating excessive dust.
- F. The CONTRACTOR shall be responsible for field handling, storing, deploying, seaming or connecting, temporary restraining (against wind), anchoring, and other aspects of geotextile installation.
- G. The CONTRACTOR shall accept and retain full responsibility for all materials upon delivery to the Site through installation and shall be held responsible for any defects.
- H. No equipment shall operate directly on geotextile fabric.

3.3 REPAIRS

- A. Any holes or tears in the geotextile shall be repaired using a geotextile patch consisting of the same geotextile secured with a 12-inch overlap in all directions.
- B. Damaged areas too large for patching shall be removed and replaced as directed by the CQA ENGINEER.

3.4 PLACEMENT OF RIPRAP

- A. Riprap material placed on top of a geotextile shall be placed in such a manner as to ensure:
 - 1. The geotextile is not damaged.
 - 2. Minimal slippage of the geotextile occurs.
 - 3. No excess tensile stresses shall occur in the geotextile

END OF SECTION

SECTION 31 23 00

EXCAVATION AND FILL

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for Site preparation, excavation, filling, and grading.
- B. Related sections:
 - 1. Section 01 35 43 – Environmental Procedures
 - 2. Section 01 74 19 – Waste Management and Disposal
 - 3. Section 32 11 23 – Aggregate Base Course
 - 4. Section 33 42 00 – Culvert Pipe
 - 5. Section 32 92 19 – Seeding

1.2 REFERENCES

- A. Latest version of American Society for Testing and Materials (ASTM) standards:
 - 1. ASTM D698 - Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
 - 2. ASTM D2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
 - 3. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
- B. State of Wyoming Department of Transportation (WYDOT) Standard Specifications for Road and Bridge Construction, 2010 Edition

1.3 SOURCE OF SUPPLY

- A. The source of the fill material for the Work will be from the Site excavations (landfill waste and clean fill material) or other on-site borrow areas identified by the OWNER or CQA ENGINEER. For bidding purposes, the CONTRACTOR may assume that sufficient quantities of clean fill material, meeting the specified requirements, will be available for use from these on-site sources.

1.4 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. The CONTRACTOR shall provide a Soils and Waste Excavation and Fill Plan (EFP) that discusses the proposed methods of construction, including topsoil stripping, excavation (waste and clean fill), hauling, filling, moisture-conditioning, and compaction. See Section 01 74 19 – Waste Management and Disposal for requirements of EFP. Review of the EFP shall be for compatibility with existing

Site operations. The CONTRACTOR shall remain responsible for the adequacy and safety of the methods.

1.5 CONSTRUCTION QUALITY CONTROL

- A. All Work shall be constructed, monitored, and tested in accordance with the requirements set forth in Table 31 23 00-1 below, or as approved by CQA ENGINEER in a method specification.

TABLE 31 23 00-1
MINIMUM EARTHWORKS
QUALITY CONTROL TESTING REQUIREMENTS

Test	Method	Testing Frequency	Minimum Requirements
Standard Proctor	ASTM D698	1 per soil type	N/A
In-Place Density	ASTM D2922 / ASTM D3017	1 per 2,000 CY or 1,000 SY	95% max. dry density, ±3% optimum or per method specification

- B. All soil testing shall be the responsibility of the CONTRACTOR.
- C. Field density testing shall be performed pursuant to ASTM D2922, Nuclear Density Meter Testing, by a certified qualified meter operator. In the event that ASTM D698 and ASTM D2922 are not applicable because of oversize material, the CONTRACTOR shall provide a method specification for compaction. The method specification shall provide the minimum number of passes, the maximum lift thickness, and the specific equipment that will be used to compact the fill and provide compaction equivalent to 95% of standard Proctor maximum density. Compliance with this method specification, if required, will be documented by the CONTRACTOR's CQC representative and monitored by the OWNER's REPRESENTATIVE.
- D. The CONTRACTOR shall be responsible for cooperating with the CQA ENGINEER during all testing activities. The CONTRACTOR shall provide equipment and labor to assist the CQA ENGINEER in sampling, if requested, and they shall also provide access to all areas requiring testing activities.
- E. All excavation, backfill, and grading operations shall be monitored by the CQA ENGINEER.
- F. Any Work found unsatisfactory or disturbed by subsequent operations before acceptance is granted shall be corrected by the CONTRACTOR as directed by the CQA ENGINEER at no additional cost to the OWNER.

1.6 TOLERANCES

- A. Excavation limits are defined by final design grade as shown in the Contract Drawings or maximum depth of observed waste, whichever is greater.
- B. Fill limits are defined by the lines and grades shown in the Contract Drawings.
- C. CONTRACTOR shall maintain uniform gradients between adjacent elevations for fill areas shown in the Contract Drawings with temporary slopes no greater than 2H:1V. In areas where fill does not attain final design grade as shown in the Contract Drawings, temporary completion slopes shall not exceed 4H:1V.
- D. The tolerances for construction, unless otherwise approved by CQA ENGINEER, shall be as follows:
 - 1. Slopes:
 - a. Line: ± 0.5 feet
 - b. Grade: +0.1 feet, - 0.33 feet
 - 2. Floors:
 - a. Line: ± 0.5 feet
 - b. Grade: +0.1 feet, - 0.33 feet
 - 3. Stormwater channels
 - a. Line: ± 0.2 feet
 - b. Grade: ± 0.1 feet

1.7 PROTECTION OF WORK

- A. CONTRACTOR shall use all means necessary to protect all prior work and materials.
- B. CONTRACTOR shall contact utility companies and locate, mark out, and protect all existing utilities before commencement of the Work.
- C. CONTRACTOR shall protect benchmarks, survey markers, fences, monitoring wells, gas probes, and other existing structures from damage due to the CONTRACTOR's activities.
- D. CONTRACTOR shall repair damage caused by the Work at no additional cost to OWNER.
- E. Erosion control must be maintained. Erosion control measures shall be as noted in the Contract Drawings and as specified in the Surface Water Pollution Prevention Plan (SWPPP). See Section 01 35 43 – Environmental Procedures for SWPPP requirements.
- F. After fill materials have been placed, the CONTRACTOR shall maintain the surface free of ruts, depressions, and/or damage resulting from the hauling and handling of any material, equipment, tools, etc. In the event of damage, the CQA ENGINEER will identify any areas requiring repair, and the CONTRACTOR shall make all repairs and replacements necessary to the satisfaction of the CQA ENGINEER and at no additional cost to the OWNER.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Fill materials used in conjunction with the Work shall either be:
 - 1. Relocated landfill waste material, see Section 01 74 19 – Waste Management and Disposal; or
 - 2. On-site soils derived from excavations and/or other on-site borrow area.
- B. Pipe bedding material shall be Class B Bedding that meets the requirements of Section 803.11 of the WYDOT Standard Specifications.
- C. Aggregate road base material shall meet the requirements in Section 32 11 23 – Aggregate Base Course

PART 3 – EXECUTION

3.1 SITE PREPARATION

- A. The CONTRACTOR shall develop temporary construction access to the excavation and fill area(s) as necessary and in consideration of Article 1.7 of this Section.
- B. The CONTRACTOR shall install erosion control as shown in the Contract Drawings and as specified in the SWPPP immediately down-slope of each area to be disturbed prior to the beginning of work in that area. The CONTRACTOR shall maintain erosion control for the duration of the Work. Accumulated sediment shall be disposed of on-site by the CONTRACTOR in a manner approved by the OWNER.

3.2 TOPSOIL REMOVAL

- A. CONTRACTOR shall strip all vegetative matter, rubbish, roots in excess of one-inch diameter, and other deleterious materials from the waste relocation fill areas and designated borrow area(s) if necessary. Vegetative matter shall be stockpiled or incorporated into Site composting operations.
- B. Topsoil shall be stripped to a minimum depth of six inches, or as approved by CQA ENGINEER, where required.
- C. Topsoil shall be excavated and removed in a manner that will minimize contamination with other soil horizons. Such measures as are necessary shall be taken to ensure that the removal of topsoil does not result in erosion or excessive sedimentation as described in the CONTRACTOR'S SWPPP.
- D. Removed topsoil shall be stockpiled at locations designated by the EFP and approved by the CQA ENGINEER and OWNER. Stored topsoil shall not be disturbed by construction or on-site activities, and shall be protected from wind and water erosion, unnecessary compaction, and contamination that would lessen the capability of the material to support vegetation when redistributed.

- E. Topsoil stockpiles shall be graded to minimize erosion and prevent ponding of precipitation in the stockpile areas.
- F. Stockpiled topsoil shall not be moved until required for redistribution on a regraded area.

3.3 EXCAVATION

- A. Excavation shall be performed to the lines and grades indicated in the Contract Drawings and in accordance with Section 01 74 19 – Waste Management and Disposal
- B. No excavation shall begin until the CONTRACTOR has provided construction staking for the proposed work.
- C. CONTRACTOR shall minimize the disturbance to surrounding areas during excavation.
- D. Work shall be suspended by CONTRACTOR when, in the opinion of the CQA ENGINEER, the Site is overly wet, muddy, or otherwise unsuitable for proper maintenance, until directed otherwise by CQA ENGINEER.
- E. All necessary precautions shall be taken to preserve the material below and beyond the lines of excavation in the soundest possible condition. Where required to complete the Work, all excess excavation or over-excavation shall be refilled with approved clean fill material placed and compacted to the satisfaction of the CQA ENGINEER in accordance with Article 1.5 of this Section.
- F. Safe temporary construction slopes shall be the responsibility of CONTRACTOR and at no times shall exceed 2H:1V. CONTRACTOR shall inspect all temporary and permanent open-cut excavations on a regular basis for signs of instability. Should signs of instability be noted, CONTRACTOR shall immediately undertake remedial measures and shall notify CQA ENGINEER immediately. All cut slopes shall be left in smooth, safe, and stable condition at the end of the workday.
- G. All excavated soils shall either be placed in stockpiles to be used as clean fill material or hauled to a designated fill area. During excavation, grades shall be maintained to provide drainage of any surface waters that may impact the Work.

3.4 UNAUTHORIZED EXCAVATION

- A. All excavations that are not approved by the OWNER or OWNER's REPRESENTATIVE, together with removing and disposing of the associated material, shall be at CONTRACTOR's expense. Unauthorized excavations shall be filled and properly-compacted with clean fill material at CONTRACTOR's expense.

3.5 STOCKPILE CONSTRUCTION

- A. Surplus excavated clean soils shall be hauled and deposited in the designated fill areas or stockpiled.

- B. Stockpiles shall have side slopes no steeper than 3H:1V. The stockpiles shall be graded to drain, sealed by tracking parallel to the slope with a bulldozer or other means, and dressed daily during periods with fill is taken from the stockpile.
- C. CONTRACTOR shall cover designated stockpiles on US Forest Service property that are in place for more than two months with temporary re-vegetation.
- D. Watering shall be performed during stockpiling to control dust.

3.6 SURFACE WATER CONTROL

- A. CONTRACTOR shall construct temporary and permanent surface water control features as shown in the Contract Drawings, and/or the CONTRACTOR'S EFP and SWPPP and/or as required to prevent significant erosion and sediment transport of stockpiles, excavation, and fill areas from storm water runoff. Run-on and runoff berms and six inches of daily cover shall be used in all waste filling areas or areas where waste is exposed.
- B. The CONTRACTOR shall provide all equipment and facilities and perform all work to make and keep the excavation and fill areas dry of surface water, construct the temporary sediment control systems, and improve the systems immediately if improvements are subsequently found to be necessary or prudent.
- C. The CONTRACTOR shall remove the temporary facilities when they are no longer necessary and restore disturbed areas in accordance with Section 32 92 19 – Seeding.
- D. The CONTRACTOR is responsible for control of all surface water, as determined by OWNER or CQA ENGINEER, for the orderly progress of the WORK.
- E. The CONTRACTOR shall be liable for injury and damage resulting from failure to satisfactorily control sediment and surface water.

3.7 CLEAN PLACEMENT AND COMPACTION

- A. Clean fill material shall be placed, as required, in areas where fill is required to achieve the final design lines and grades shown in the Contract Drawings.
- B. Clean fill shall be placed in loose lifts that result in a compacted lift thickness of no greater than 12 inches.
- C. If the moisture content of the prepared foundation or of any lift of clean fill is too dry or too smooth to bond properly with the subsequent lift or to prevent proper compaction, it shall be moisture-conditioned and/or re-worked with harrow, scarifier, disk, or other suitable equipment to provide a satisfactory moisture content and surface before additional clean fill is placed thereon.

If the moisture content of any lift of clean fill is excessively wet to allow for proper compaction or for subsequent lifts to be placed thereon, it should be removed and allowed to dry, or re-worked and aerated with a harrow, scarifier, disk, or other suitable equipment to reduce the moisture content to an acceptable level,

as determined by the CQA ENGINEER. It shall then be re-compacted before the next lift of clean material is placed.

Determination of such wet or dry conditions shall be made by the CQA ENGINEER.

- D. The CONTRACTOR shall not proceed to the next lift until the current lift has been tested and/or approved by the CQA ENGINEER. The CONTRACTOR shall be held responsible for repairing deficiencies discovered after proceeding to the next lift without prior approval from the CQA ENGINEER at no additional cost to OWNER.
- E. Each lift clean fill shall be compacted to at least 95% of the maximum dry density and within $\pm 3\%$ of optimum moisture, as measured according to ASTM D698 (Standard) where directed by the CQA ENGINEER. The dry unit weight and moisture content shall be measured in-place according to ASTM D2922 (Method B) and ASTM D3017 at the frequencies presented in Table 31 05 13-1, or as approved through a method specification.
- F. Compaction shall be accomplished with equipment and by methods approved by CQA ENGINEER. If such equipment or methods are found unsatisfactory for the intended use, CONTRACTOR shall replace the unsatisfactory equipment with other types or to adjust methods until proper compaction is achieved. After each layer of fill material has been placed, spread, and moisture conditioned, the layer shall be compacted by passing compaction equipment over the entire surface of the layer a sufficient number of times to obtain the required density, as specified herein.
- G. No frozen or partially thawed clean fill material shall be placed, spread, or compacted. No clean fill shall be placed or spread while the surface on which the material is being placed is frozen or thawing, during unfavorable weather conditions, or during periods of significant precipitation as determined by the CQA ENGINEER.
- H. If the clean fill freezes during construction, the CONTRACTOR shall remove the frozen material, scarify the remaining unfrozen fill, and then place and compact new clean fill in accordance with the requirements of this Section. The frozen clean fill material shall not be reused until has been thawed, disked, and re-worked to acceptable unformed moisture content.
- I. The entire construction area shall be left in a manner to promote runoff at the end of each day.

3.8 BACKFILL WITH ON-SITE DEBRIS

- A. Existing Site stockpiles of glass and concrete rubble may be used to backfill waste excavations below final design grades as shown in the Contract Drawings.
- B. Clean fill material shall be mixed with debris prior to backfilling, where possible, or within excavation to

- C. A minimum of five feet of clean fill material shall be placed over any on-site debris material used to backfill waste excavations.
- D. On-site debris will be prohibited for use as backfill in excavations within permanent stormwater channel alignments or to develop stormwater channel final grades.

3.9 FINISH GRADING

- A. CONTRACTOR shall smooth finished surfaces within specified tolerances.

3.10 PIPE BEDDING

- A. Pipe bedding shall be manually placed in pipe trenches and loosely around pipes.
- B. Pipe bedding shall be compacted below spring line of pipe by hand tamping as shown in the Contract Drawings. No compaction of pipe bedding material is required above the spring line of pipe.
- C. General fill shall be placed over uncompacted pipe bedding to match surrounding grade and compacted by hand tamping or CQA ENGINEER-approved alternate compaction method while maintaining integrity of underlying culvert pipe, as shown in the Contract Drawings.

3.11 SURVEY CONTROL

- A. Topographic surveys of excavation and fill areas shall be conducted by the CONTRACTOR to verify quantities for payment purposes. Method of classification of excavated materials for payment purposes shall be approved by CQA ENGINEER. Quantities will be verified by CQA ENGINEER.

END OF SECTION

SECTION 31 37 00

RIPRAP

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for furnishing and installing riprap.
- B. Related sections:
 - 1. Section 31 05 19.13 – Geotextiles for Earthwork

1.2 REFERENCES

- A. Latest version of American Association of State Highway and Transportation Officials (AASHTO) standards:
 - 1. AASHTO T27 – Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates
 - 2. AASHTO T85 – Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate
 - 3. AASHTO T96 - Standard Method of Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
 - 4. AASHTO T104 - Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
- B. Latest version of American Society for Testing and Materials (ASTM) standards:
 - 1. ASTM C88 – Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
 - 2. ASTM C127, Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregates
 - 3. ASTM D422, Test Method for Particle Size Analysis of Soils
 - 4. ASTM C535 – Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall provide the following information after Contract award, but no later than 14 days prior to material arrival on-site
 - 1. Source or quarry name
 - 2. Gradation laboratory data
 - 3. A copy of QC test results of properties outlined in Part 2 of this Section.

PART 2 – PRODUCTS

2.1 RIPRAP

- A. Material:
1. Riprap shall be imported from off site.
 2. Stone for riprap shall be hard, angular field or quarry stone that is sound, durable, free of shale seams and coatings, and of such characteristics that stone will not disintegrate when subjected to action of water
 3. Riprap shall have a minimum specific gravity of 2.5 according to the bulk-saturated, surface-dry basis, as determined by ASTM C127 (AASHTO T85).
 4. Riprap shall have absorption of less than 1.0%, as determined by ASTM C127 (AASHTO T85).
 5. Riprap shall have a soundness loss of less than 10%, as determined by ASTM C88 (AASHTO T104) using sodium sulfate.
 6. Riprap shall have a Los Angeles abrasion loss value of less than 40% for 500 revolutions, as determined by ASTM C535 (AASHTO T96).
 7. Stones shall be free of dirt, debris, and deleterious material.
- B. Size:
1. Riprap shall comply with the gradations requirements presented in Table 31 37 00-1 below.

TABLE 31 37 00-1
RIPRAP GRADATION

d50 Median Rock Size (Inches)	Typical Rock Diameter (Inches)	Percent of Material Smaller than Typical Rock (by mass)
6	12	70–100
	9	60–70
	6	35–60
	2	2–10

2. Dust of fines less than ½ inch in maximum cross section accumulated from quarrying or loading operations shall not exceed 5% by weight.

PART 3 – EXECUTION

3.1 PLACEMENT

- A. Riprap shall be provided at the locations shown in the Contract Drawings. Prior to placing the riprap, CONTRACTOR shall install geotextile fabric as described in Section 31 05 19.13 – Geotextiles.
- B. Riprap shall be placed from the bottom up on the geotextile fabric in such a manner as to produce a reasonable well-graded mass of rock with the minimum practicable percentage of voids. Maximum drop height of stone shall not exceed one foot.
- C. The larger stones shall be well distributed and the entire mass of stones in their final position shall be free from objectionable pockets of small stones and clusters of larger stones.

- D. Placing riprap in layers will not be permitted. Placing of riprap by dumping into chutes or by similar methods likely to cause segregation of the various sizes will not be permitted. The desired distribution of the various stone sizes of stones throughout the mass shall be obtained by selective loading of the material at the quarry or other source, controlled dumping of successive loads during final placement, or by other methods of placement which will produce the specified results. Rearranging of individual stones by mechanical equipment or by hand will be required to the extent necessary to obtain a reasonably well-graded distribution of stone sizes.

3.2 MAINTENANCE

- A. Riprap shall be maintained in a satisfactory condition, as determined by the OWNER's REPRESENTATIVE, until completion of the Work. Damage before completion of the Work shall be repaired and /or replaced at no additional cost to OWNER.

END OF SECTION

DIVISION 32 – EXTERIOR IMPROVEMENTS

SECTION 32 11 23

AGGREGATE BASE COURSES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for aggregate base course material.

1.2 REFERENCES

- A. Standards referenced in this Section are:
 - 1. ASTM C136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
 - 2. ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort
- B. State of Wyoming Department of Transportation (WYDOT) Standard Specifications for Road and Bridge Construction, 2010 Edition

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall provide the following information after Contract award, but no later than 14 days prior to material arrival on-site
 - 1. Source or quarry name
 - 2. Gradation laboratory data

PART 2 – PRODUCTS

2.1 AGGREGATE ROAD BASE

- A. Aggregate road base material shall consist of Class W grading base course material that meets the requirements of Section 803.4.3 of WYDOT Standard Specifications.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Final roadways and waste management areas shall be laid out in accordance with the lines and grades shown on the Contract Drawings. The areas shall be approved in the field by the CQA ENGINEER.
- B. CONTRACTOR shall verify that gradients and elevations of subgrade are correct.

- C. CONTRACTOR shall verify that subgrade is dry and has been approved prior to road base placement. CONTRACTOR shall notify CQA ENGINEER who will examine subgrade prior to aggregate base course placement.

3.2 PLACEMENT

- A. Base course aggregate shall be spread uniformly over the area to produce the required lines, grades, and cross-section after compaction.
- B. Material may be constructed in a single loose lift up to 4 inches in thickness.
- C. No materials shall be placed on subgrades which are muddy, frozen, or have standing water thereon.
- D. CONTRACTOR shall level and contour surface to the elevations and gradients shown in the Contract Drawings.
- E. Base course material shall be compacted to at least 95% of the standard Proctor maximum dry density (ASTM D698) or by a method approved by the CQA ENGINEER to achieve equivalent compaction.
- F. Adjust moisture content to achieve near optimum moisture content prior to compaction. If excess water is apparent, scarify aggregate and aerate to reduce moisture content.

3.3 FINISHING

- A. Finished grade shall match finished grade of adjacent finished surface. If, upon inspection, the installation is deemed unacceptable by the CQA ENGINEER, it shall be removed, replaced, or reset by CONTRACTOR at no additional expense to OWNER.
- B. Finish surfaces by rolling with a smooth steel wheel roller. Water the surface and spread stones prior to rolling.
- C. Repair soft, yielding areas that develop during final rolling.
- D. Where areas are disturbed by construction traffic, weather, or other means, grade and recompact as necessary.

END OF SECTION

SECTION 32 91 16

PLANTING SOIL STABILIZATION

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The CONTRACTOR shall furnish all labor, materials, tools, supervision, transportation, and installation equipment necessary to re-vegetate designated excavation areas, borrow areas, and fill areas as noted in the drawings. All re-vegetation shall be done in strict accordance with the requirements specified herein.
- B. The CONTRACTOR shall review the installation procedures and coordinate the re-vegetation work with other site work.

1.2 REFERENCES

- A. Federal Seed Act, amended August 1988, Wyoming Seed Law, 11-12-101 through 11-12-123, (Revised 2007), and Wyoming Weed and Pest Control Act of 1973
- B. Association of Official Seed Analysts and International Seed Testing Association Guidelines
- C. American Society for Testing and Materials (ASTM) Standard Specification for Wire Cloth and Sieves for Testing Purposes, Method E-11
- D. Test Methods for the Examination of Composting and Compost United States Composting Council (2002)
- E. Colorado State University Cooperative Extension Service Fact Sheet No. 0.519 Managing Soil Compaction (2003)
- F. Wyoming Forage Certification Standards for Noxious Weed Free Forage, Wyoming Department of Agriculture (1999)
- G. North American Weed-Free Forage Program Minimum Certification Standards, North American Weed Management Association (2003)

1.3 DEFINITIONS

- A. Clod: A soil clod consists of an aggregation of soil particles that is hard and when broken consists of lumps that resist further breakdown by hand.
- B. Mulch: Applied to seed bed immediately following seeding to prevent erosion, retain moisture and minimize the spread of weeds. Composed of certified weed-free hay.
- C. Organic soil amendment: Improves soil structure and water-holding capacity, and restores soil microbial activity and nutrient cycling in the soil. Typically composed of one or more of the following: peat, wood chips, or composted material.

- D. Perennial seeding: Seeding performed in areas required to establish long-term vegetation as an integral part of a cover.
- E. Plant growth medium: Topsoil and, if needed, incorporated mixture of organic amendment and/or fertilizer, which is prepared as a seedbed, seeded, and mulched.
- F. Weed seeds: Seeds of declared weeds or designated noxious weeds as defined by the Wyoming Weed and Pest Control Act W.S. 11-5-102 (a)(xi) and prohibited, restricted, or regulated noxious weeds as define by the Wyoming Seed Law, W.S. 11-12-101(b)(xviii).

1.4 SUBMITTALS

- A. CONTRACTOR shall submit a Work Plan detailing the sources of all re-vegetation materials, methods, techniques, and equipment for mixing seed and erosion control techniques including hay mulching and erosion mats that will be used to perform re-vegetation work for review and approval by the ENGINEER.
- B. Material certifications:
 - 1. Seed: Seed labels or certification from Supplier listing species scientific name, variety, common name, origin, purity, germination and weed seed content
 - 2. Mulch:
 - a. Calculation of mulch application rate (in bales per acre) for each delivery.
 - b. Description of approach for application of tackifier to hold mulch in place. Tackifier shall be StarTak 100 by CHEMSTAR. Mix 12 x 50-pound bags per 3,000 gallons of water and apply at rate of 100 dry pounds per acre on top of mulch
 - c. Empty and loaded weight slips from a certified scale of all trucks used in the delivery of mulch.
 - d. Weed-free certification for hay mulch.
 - e. Receipts listing the number of bales in each truckload.
 - 3. Erosion Control Mats:
 - a. Certification from the manufacturer on the specifications of the erosional control mats delivered to the site.

PART 2 – PRODUCTS

2.1 MATERIAL PACKAGING, DELIVERY, AND INSPECTION

- A. Deliver seed in sealed and labeled containers or rodent-proof bags in accordance with standard commercial practice.
- B. Seed shall be free of mold and moisture. All labeling shall be intact and legible.
- C. Deliver mulch free of excessive mold and moisture.
- D. Inspect all materials upon delivery to the worksite and prior to use. Ensure that materials meet the requirements of this Section.

- E. Remove any nonconforming materials from the worksite within five days at no expense to the OWNER.

2.2 EQUIPMENT

- A. Supply equipment that meets the following minimum requirements/capabilities:
 - 1. Seedbed preparation equipment: Equipment capable of providing two-inch maximum clod size in the upper two inches of soil and a smooth, reasonably firm, but friable seedbed such as a spring-tooth harrow, cultipacker, roller harrow, or other ENGINEER-approved equipment.
 - 2. Drill seeder:
 - a. Seeding equipment with at least two seed boxes, one for fluffy seeds and one for chaffy seeds.
 - b. Seeder shall be capable of drilling seed on 6- to 8-inch centers. The seeder shall be equipped with double disc furrow openers and intact depth bands with scrapers on all disc openers, packer wheels with adjustable tension and coulter wheels, or as approved by the ENGINEER.
 - c. Select the seeding equipment that efficiently and effectively distributes seed evenly and places seed at a depth of 0.25 to 2.0 inches, depending on the seed.
 - 3. Mulch applicator: Propose equipment for approval. Equipment should preserve fiber length.
 - 4. Mulch crimper:
 - a. Crimper shall have V-type wheel land packers or scalloped disc land packers capable of anchoring mulch on eight-inch centers.
 - b. Discs with sharp blades shall not be accepted for crimping.
 - 5. Tackifier: Propose installation equipment for approval.

2.3 MATERIALS

2.1 ORGANIC SOIL AMENDMENTS

- A. Organic soil amendment shall consist of existing compost stockpiled on site.
- B. Compost shall be free of stones, sticks, garbage, and other debris.

2.2 SEED MIX

- A. Provide seed for grass in accordance with Table 32 91 16-1.

TABLE 32 91 16-1
DRILL SEED MIX TABLE

Common Name	Scientific Name	Percentage	PLS/ac
Western wheatgrass	<i>Pascopyrum smithii</i>	10	0.4
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	10	0.4
Idaho fescue	<i>Festuca idahoensis</i>	10	0.4
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	10	0.4
Big bluegrass	<i>Poa secunda</i>	10	0.4
Mountain brome	<i>Bromus marginatus</i>	10	0.4
Slender wheatgrass	<i>Elymus trachycaulus</i>	15	0.6
American vetch	<i>Vicia americana</i>	5	0.2
Rocky Mountain penstemon	<i>Penstemon strictus</i>	5	0.2
Yarrow	<i>Achillea millefolium</i>	5	0.2
Blue Flax	<i>Linum lewissii</i>	5	0.2
Creeping Barberry	<i>Mahonia repens</i>	5	0.2
Totals		100	4

Note: Seeding rate is for drill seeding. Broadcast seeding to be performed at two times the drill seed rate.

- B. Test seed for the following:
1. Purity and germination: Provide retesting results from seed Supplier if seed was stored more than six months from the date of the Supplier's original acceptance test.
 2. Prohibited noxious weed seed: Seed shall contain no federal- or state-listed prohibited noxious weed seed as specified in the Wyoming Seed Law
 3. Restricted noxious weed or regulated weed seed: Seed shall contain no more noxious seeds per pound of any single restricted weed species than the amount established by the Wyoming Department of Agriculture as specified by Wyoming Seed Law
 4. Regulated weed seed: Seed shall contain no more than 1% by weight of weed seed of other crops and plant species.
- C. Test seed in accordance with guidelines established by the Association of Official Seed Analysts, International Seed Testing Association, and the Federal Seed Act standards. Test results shall be no more than six months old from the date of delivery to the worksite.
- D. Test results shall be included on the label and/or certificate for each container of seed delivered to the worksite. In accordance with Wyoming Seed Law Section 11-12-105, seed supplier shall affix this label to the sealed container and include the following information:
1. Commonly accepted name of the kind and variety of the seed;
 2. The full name and address of the person selling, offering or transporting the seeds for sale;
 3. The percentage of pure seed, crop seed (not to be added to pure seed), inert matter, common weed seeds by weight, germination, hard seed, and the month and year of the germination test;

4. The origin of the seed;
 5. Lot number or other lot identification;
 6. Name and number of each kind of restricted noxious weed seeds per pound; and
 7. The words "poisonous treated" shall appear in bold print if the seeds have been treated with chemicals which are toxic or poisonous to either humans or livestock.
- E. Sources for native seed variety shall be subject to inspection and acceptance by the ENGINEER.
- F. ENGINEER may send seed to an independent testing laboratory to verify seed quality.
- G. Seed mixture will require seed box separation. Provide the species composition for each seed box.

2.3 MULCH

- A. Mulch shall not be brittle, molded, or rotted, and shall be free of cattails and weed seeds of all plants on the Designated Noxious Weed List and the Prohibited Noxious Weed List as stated by the Wyoming Weed and Pest Control Act and Wyoming Seed Act, respectively.
- B. If mulch is harvested outside of Wyoming, the ENGINEER may accept the mulch if there is no evidence of weeds listed on the Wyoming Designated Noxious Weed and Prohibited Noxious Weed lists. The ENGINEER will review the weed-free mulch certification, inspect the mulch upon delivery, and may perform periodic inspections of the mulch during application. If the ENGINEER determines that the mulch contains weeds listed on either list, mulch application will be stopped. The ENGINEER will reject the bale being applied and may reject associated bales prior to application.
- C. Mulch shall be accompanied by documentation that the mulch has been inspected by the designated authority for certifying weed-free forage in the state from which it was obtained. The transit certificate shall match the weed-free certification certificate.
- D. Mulch shall be in air-dry condition and suitable for placing with mulch application equipment.
- E. Mulch shall be delivered in large, round bales that provide longer fibers. Large square bales may be accepted. Small square bales shall not be accepted.
- F. ENGINEER will perform inspections of mulch upon delivery to ensure mulch is in suitable condition for use.
- G. Provide native grass hay. Tall fescue (*Lolium arundinaceum* or *Festuca arundinacea*) and smooth brome (*Bromopsis inermis*) are specifically prohibited for use as grass hay mulch. Provide confirmation from the supplier that the product does not contain either of these species.

- H. Provide certified weed-free hay. Weed-free straw mulch may be accepted by the ENGINEER if supplies of hay are limited due to environmental conditions, such as drought or disease.

2.4 EROSION CONTROL MATTING

- A. Erosion control matting shall consist of long-term erosion control blanket Excel CC-4, all natural, or ENGINEER-approved equivalent.

PART 3 – EXECUTION

3.1 MATERIAL AND EQUIPMENT STORAGE REQUIREMENTS

- A. Materials and equipment shall be stored in such a manner as to maintain the as-delivered condition.

3.2 SCHEDULING/SEQUENCING

- A. Perform the Work in the following sequence:
 1. Place and incorporate organic soil amendment.
 2. Prepare seedbed.
 3. Seed.
 4. Mulch or place erosion matting.
- B. Do not proceed to subsequent work activity without authorization from the ENGINEER.
- C. Seeding times:
 1. Fall seeding (preferred): Beginning October 1 (or after 4 consecutive days of average daily temp below 50° F) until freezing conditions (or as approved by the ENGINEER).
 2. Spring seeding: March 1 (or after soil thaws) – May 15 (or as approved by the ENGINEER).
- D. Prior to the start of work activities, assess field conditions and ensure that soil and climate conditions are favorable to perform work activities.

3.3 PLACE COMPOST AND/OR OTHER SOIL AMENDMENTS AND TOPSOIL

- A. Organic soil amendment shall be required for re-vegetation on slopes greater than three horizontal (H) to one vertical (V).
- B. Top soil stripped from excavation and fill areas shall be used for reseeding on slope less than 3H to 1V.
- C. Notify the ENGINEER at least 24 hours prior to the first time organic amendment placement is planned to allow for inspection.
- D. Load and haul existing stockpiled compost from the stockpile area to the areas to be vegetated.

- E. Spread the compost evenly over the area to be vegetated with a truck-mounted or tractor-powered box spreader or bulldozer or grader. Application rate shall be approximately 60 dry tons per acre.
- F. Within 24 hours of application, soil amendments shall be uniformly incorporated 6 inches into the surface of the soil on a maximum of 16-inch centers using disking techniques or other ENGINEER-accepted methods to otherwise incorporate amendment and achieve a uniform mixture.
- G. Should the tilling not penetrate the required 6 inches, chisel or rip to 6 inches on maximum 16-inch centers prior to tilling.
- H. Perform inspections on the soil amendment placement activities to assure even and uniform application.

3.4 SEEDBED PREPARATION

- A. Notify the ENGINEER at least 24 hours prior to the first time seedbed preparation is planned to allow for inspection of seedbed preparation equipment.
- B. Do not commence seedbed preparation operations without organic soil amendment incorporation inspection, seed bed preparation equipment inspection and authorization from the ENGINEER.
- C. Soil shall be reasonably free of soil aggregates (including clods) in the top surface of the prepared soil.
- D. Roll and/or harrow, or otherwise prepare the area to provide a smooth, reasonably firm, but friable seedbed.
- E. Notify ENGINEER when ready for inspection of seedbed preparation operations. Do not commence seeding operations without authorization from the ENGINEER.

3.5 SEEDING

- A. CONTRACTOR shall notify the ENGINEER at least 24 hours prior to the first time seeding is planned to allow for inspection of seeding equipment and calibration.
- B. Calibrate all seeding equipment. Drill seeding equipment shall be calibrated as recommended by the Manufacturer.
- C. Apply seed at rates (in pounds of pure live seed [PLS] per acre) stated in Table 32 91 16-1. Seed shall be applied within 10% (by weight) of the rate specified.
- D. Determine the texture of the plant growth medium to determine depth of seed drilling.
 - 1. If the plant growth medium is a sand, drill all seeds to a depth of 0.5 to 1 inch.
 - 2. If texture of plant growth medium is medium to fine, drill all seeds to a depth of 0.25 to 0.5 inches.

- E. ENGINEER will inspect the seeding activities to assure even and uniform application periodically for the duration of seeding activities.

3.6 MULCHING AND ANCHORING

- A. Place mulch in a continuous cover of uniform thickness at a rate of two tons per acre over the seeded area for areas as shown on Contract Drawings and as directed by the ENGINEER.
- B. Apply mulch within 5% (by weight) of the rate specified.
- C. Do not commence mulching and anchoring operations without seed application inspection, mulching equipment inspection, and authorization from the ENGINEER.
- D. ENGINEER will inspect the mulch application activities periodically for the duration of mulch application activities.
- E. Anchor mulch to the soil by crimping in a pattern (e.g., perpendicular to the slope on side slopes and perpendicular to prevailing wind direction on the flats). Crimp mulch within 24 hours of application, barring delays from inclement weather.
- F. Crimp mulch into the soil to achieve rows of standing mulch; apply tackifiers for re-vegetation areas.
- G. Do not sever the mulch during anchoring.

3.7 EROSION CONTROL MATTING

- A. Install erosion control matting on slopes steeper than 4H:1V in lieu of mulch.
- B. Erosion control matting shall be installed in accordance with Manufacturer's recommendations and as approved by the ENGINEER.

3.8 ALTERNATIVE VEGETATION METHODS—SEEDING IN AREAS INACCESSIBLE TO DRILL SEEDER

- A. Areas inaccessible to drill seeding equipment, apply seed and mulch with standard hydraulic equipment.
 - 1. Hydromulch will consist of virgin wood fiber applied at 1,500 lbs/square acre and a plant-based tackifier applied at 200 lbs/square acre.

3.9 PROTECTION OF WORK

- A. Perform seeding operations only during periods when successful results can be obtained. Consider drought, excessive moisture, frozen soil or other unsatisfactory conditions to determine if work should commence or continue.
- B. Do not conduct soil amendment placement, seedbed preparation, seeding, mulch, or install erosion control matting when wind conditions cause the materials to blow from the intended target area.

- C. Protect finished areas from erosion during all phases of the work.
- D. Repair areas not accepted by the ENGINEER due to damage from any cause.

END OF SECTION

DIVISION 33 – UTILITIES

SECTION 33 42 13

PIPE CULVERTS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for furnishing and installing culvert pipe.
- B. Related sections:
 - 1. Section 31 23 00 – Excavation and Fill

1.2 REFERENCES

- A. Latest version of American Association of State Highway and Transportation Officials (AASHTO) standards:
 - 1. AASTHO M36 – Standard Specification for Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains
 - 2. AASHTO M274-801 – Standard Specification for Steel Sheet, Aluminum-Coated (Type 2), for Corrugated Steel Pipe
- B. State of Wyoming Department of Transportation (WYDOT) Standard Specifications for Road and Bridge Construction, 2010 Edition

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. The CONTRACTOR shall prepare a proposed method specification for material placement. The method specification shall be submitted to CQA ENGINEER for review and approval a minimum of seven days in advance of the need for use of the method specification. The proposed method shall include sufficient detail for excavation, placement and compaction of pipe bedding, placement of pipe, control of the pipe grade during placement and compaction, and protection of the pipe integrity and intended performance.
- C. The CONTRACTOR shall submit shop drawings of proposed pipe, including dimensions, pipe fittings, and pipe accessories.
- D. The CONTRACTOR shall submit accurate as-built records of pipe runs, connections, and invert elevations.

PART 2 – PRODUCTS

2.1 CORRUGATED METAL PIPE

- A. Culvert pipe shall consist of aluminized corrugated metal pipe (CMP) at the dimensions shown in the Contract Drawings. Pipe shall conform to the

requirements of Section 808.5 of the WYDOT Standard Specifications and of AASHTO M274 and AASHTO M36.

- B. The material will be approved by the CQA ENGINEER on the basis of certified documentation issued by a fabrication shop commercially engaged in the manufacture of aluminum steel sheet for drainage pipes. The certification shall state that the materials meet or exceed AASTHO M274 Aluminum Steel Type II specifications.

PART 3 – EXECUTION

3.1 HANDLING AND PROTECTION OF PIPES

- A. All pipes, fittings, and appurtenances to be used in the Work shall be handled with extreme care. Proper and suitable tools and appliances for safe convenient handling and laying of pipes shall be used and care shall be taken to prevent pipe coating from being damaged. This applies particularly to coatings inside pipes. All pipes shall be carefully examined for defects and if any defective pipe or other casting is discovered after being laid, removal and replacement with a sound pipe or casting at the expense of the CONTRACTOR will be required.
- B. Whenever pipes require cutting, a wheel cutter, hydraulic cutter, or pipe saw, satisfactory to the CQA ENGINEER, shall be used. Cutting pipes with a cold chisel or cold cutter will not be permitted.

3.2 CONNECTIONS

- A. Pipe ends which are not welded shall be field joined using annular corrugated aluminum coupling bands. The bands shall be used by re-rolling the ends of the pipe to form two annular corrugations of not less than 2²/₃-inch pitch by 1/2-inch depth. The band shall mesh with at least one full corrugation and shall lap equally on each pipe end. The band width shall be a minimum of seven inches for pipe diameters up to and including thirty inches. The band width shall be a minimum of 10 1/2-inches for pipe diameters greater than 30 inches. The band shall not be more than two nominal sheet thicknesses thinner than the pipe thickness and in no case thinner than 0.048 inches.

3.3 BEDDING

- A. Pipe bedding and backfill shall be placed around the pipe where indicated on the Drawings in accordance with Section 31 23 00 – Excavation and Fill.

END OF SECTION

SECTION 33 49 00

STORM DRAINAGE STRUCTURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Section includes: requirements for precast concrete surface water inlet drainage structures.
- B. Related sections:
 - 1. Section 31 23 00 – Excavation and Fill
- C. The CONTRACTOR shall field verify all existing field conditions shown in the Contract Drawings.

1.2 REFERENCES

- A. Latest version of American Society for Testing and Materials (ASTM) standards:
 - 1. ASTM C478 – Standard Specification for Precast Concrete Water and Wastewater Structures
- B. State of Wyoming Department of Transportation (WYDOT) Standard Specifications for Road and Bridge Construction, 2010 Edition

1.3 SUBMITTALS

- A. Refer to the Article 7 of the General Conditions (EJCDC C-700) for submittal procedures.
- B. CONTRACTOR shall prepare and submit shop drawings based on existing field conditions for the review and approval of the ENGINEER prior to order and fabrication of the proposed surface water inlet.
- C. CONTRACTOR shall submit shop drawings for the proposed precast concrete surface water inlet structure including, but not limited to, dimensions, geometry, reinforcing, piping arrangements, penetrations, grating, and other components, for review and approval by the ENGINEER prior to order and fabrication.

1.4 HEALTH AND SAFETY

- A. The CONTRACTOR shall note that all work in the inlet structures will occur in a semi-closed environment. As such, CONTRACTOR shall ensure that personnel follow OSHA regulations for safe excavation slopes and confined space entry regarding protective measures that will be required when working in these conditions.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Transport and handle precast reinforced concrete products specified herein in a manner recommended by the respective manufacturers of such to prevent damage and defects.
- B. Store precast reinforced concrete inlet structures in accordance with manufacturer's recommendations to prevent joint damage and contamination.

PART 2 – PRODUCTS

2.1 PRECAST DRAINAGE STRUCTURES

- A. Precast concrete inlet structures shall be of the dimensions shown in the Contract Drawings and shall conform to WYDOT Standard Specifications and ASTM C913 requirements.
- B. Structures shall have proper cut-outs for inlet/outlet culverts, as shown in the Contract Drawings.
- C. Precast concrete shall have a 28-day compressive strength of 5,000 psi.
- D. Wall thickness shall be a minimum of eight inches with an HS-20 live load rating.
- E. Grating shall be galvanized steel with an HS-20 live load rating.

2.2 SEALANT

- A. Joints and connections shall be sealed with ConSeal CS102, or ENGINEER-approved equal.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Keep pipe and inlet interiors cleared of debris as construction progresses.
- B. Perform earthwork as specified in Section 31 23 00 – Excavation and Fill. The CONTRACTOR shall be responsible for ensuring that the subgrade is compacted to 95% maximum dry density.

3.2 EXAMINATION

- A. All precast concrete inlet structure components shall be inspected in accordance with requirements of ASTM C913 regarding repairable defects and defects subject to rejection by the OWNER's REPRESENTATIVE.
- B. All material found during the progress of the work, either before or after installation, to have cracks, flaws or other defects will be rejected by the OWNER's REPRESENTATIVE. All defective materials furnished by the CONTRACTOR shall be promptly removed from the site and new material of

acceptable quality shall be furnished by the CONTRACTOR at no additional cost to the OWNER.

3.3 LIFTING

- A. Appropriate sizing and location of lifting devices shall be the responsibility of the CONTRACTOR to assure balanced handling during installation.

3.4 INSTALLATION

- A. Pre-cast concrete inlet structures: Install bases on an 8-inch-deep compacted layer of Class B Bedding that meets the requirements of Section 803.11 of the WYDOT Standard Specifications.
- B. CONTRACTOR shall adjust the elevation of the box structure and grating cover to be flush with the proposed finish grade.
- C. Seal all culvert connections as recommended by manufacturer.

3.5 CORING

- A. Coring of existing concrete inlet structure shall be performed using an industry standard coring machine and shall not be performed using any type of hammer, chisel, jackhammer, or other method.
- B. Inlet culverts shall be grouted and/or sealed to penetration as recommended by manufacturer.

3.6 SURVEY CONTROL

- A. Rim and invert elevations of inlet structure and culverts shall be shown in Record Drawings.

END OF SECTION

CONTRACT DRAWINGS

TETON COUNTY TRANSFER STATION WASTE RELOCATION AND EARTHWORKS BID PACKAGE



Prepared for:



Teton County
Jackson, Wyoming

Prepared by:



Golder Associates Inc.
44 Union Boulevard, Suite 300
Lakewood, Colorado USA 80228

DRAWING LIST		
DRAWING NO.	TITLE	REVISION
1	COVER SHEET	B
2	OVERALL SITE PLAN	B
3	WASTE EXCAVATION PLAN	B
4	WASTE RELOCATION PLAN	B
5	GRADING PLAN	B
6	DETAILS SHEET 1 OF 2	B
7	DETAILS SHEET 2 OF 2	B

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Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED
B	2016-03-14	ISSUED FOR BID	DKW	DKW	JAR	MEM
A	2016-02-19	ISSUED FOR CLIENT REVIEW	DKW	DKW	JAR	MEM

SEAL

CLIENT
TETON COUNTY
JACKSON, WYOMING



CONSULTANT



GOLDER ASSOCIATES INC.
44 UNION BLVD, SUITE 300
LAKEWOOD, COLORADO
USA
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PROJECT
TETON COUNTY TRANSFER STATION
WASTE RELOCATION AND EARTHWORKS BID PACKAGE

TITLE
COVER SHEET

PROJECT No.
12381604A

Rev. of DRAWING
B of 1



LEGEND

- 6240 EXISTING GROUND TOPOGRAPHY (REF 2.)
- PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND POWER LINE
- EXISTING ROAD FLOWLINE
- EXISTING GEI FLOWLINE
- EXISTING RIGHT-OF-WAY
- WASTE MANAGEMENT, DIVERSION, AND COMPOSTING ACTIVE OPERATING AREA
- GW-3 EXISTING GROUNDWATER WELL
- MW-1 EXISTING MONITORING WELL (DRY)
- M-1 EXISTING METHANE MONITORING WELL
- DEAD ANIMAL PIT (DO NOT DISTURB)
- LIMITS OF BORROW SOURCE AREA

REFERENCES

1. THE WORK WILL BE COMPLETED AT AN OPERATIONAL TRANSFER STATION AND COMPOSTING FACILITY. THE TETON COUNTY TRANSFER STATION RECEIVES WASTE SIX DAYS PER WEEK (MONDAY THROUGH SATURDAY), AND WILL MAINTAIN CONTINUOUS SCALE HOUSE, TRANSFER STATION, COMPOSTING, AND WASTE DIVERSION OPERATIONS DURING THE DURATION OF THE CONTRACT.
2. THE WORK UNDER THIS CONTRACT REQUIRES SPECIAL ATTENTION TO THE SCHEDULING AND CONDUCT OF THE WORK IN CONNECTION WITH EXISTING OPERATIONS. THE CONTRACTOR SHALL VERIFY PROJECT CONDITIONS AND COORDINATION REQUIREMENTS PRIOR TO THE PERFORMANCE OF THE WORK.

REFERENCES

1. SITE LOCATION: WITHIN SECTIONS 22 AND 28, T40N, R116W, TETON COUNTY, WYOMING.
2. EXISTING GROUND TOPOGRAPHY PROVIDED BY ECS ENGINEERS, LLC. TOPOGRAPHY IS A COMPOSITE OF THE TRANSFER STATION SURVEY PROVIDED BY TETON COUNTY ON MARCH 19, 2012, A SURVEY CONDUCTED BY ECS ENGINEERS, LLC ON MAY 2012, AND PHASE I TRANSFER STATION DESIGN FROM GORDON ENVIRONMENTAL, INC., MARCH 24, 2015.
3. THE COORDINATE SYSTEM IS WGS, VERTICAL DATUM NGVD-29.4.



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A	2016-02-19	ISSUED FOR CLIENT REVIEW		DKW	DKW	JAR	MEM
Rev.	YYYY-MM-DD	DESCRIPTION		PREPARED	DESIGN	REVIEW	APPROVED

SEAL

CLIENT



TETON COUNTY
JACKSON, WYOMING

PROJECT
TETON COUNTY TRANSFER STATION
WASTE RELOCATION AND EARTHWORKS BID PACKAGE

CONSULTANT

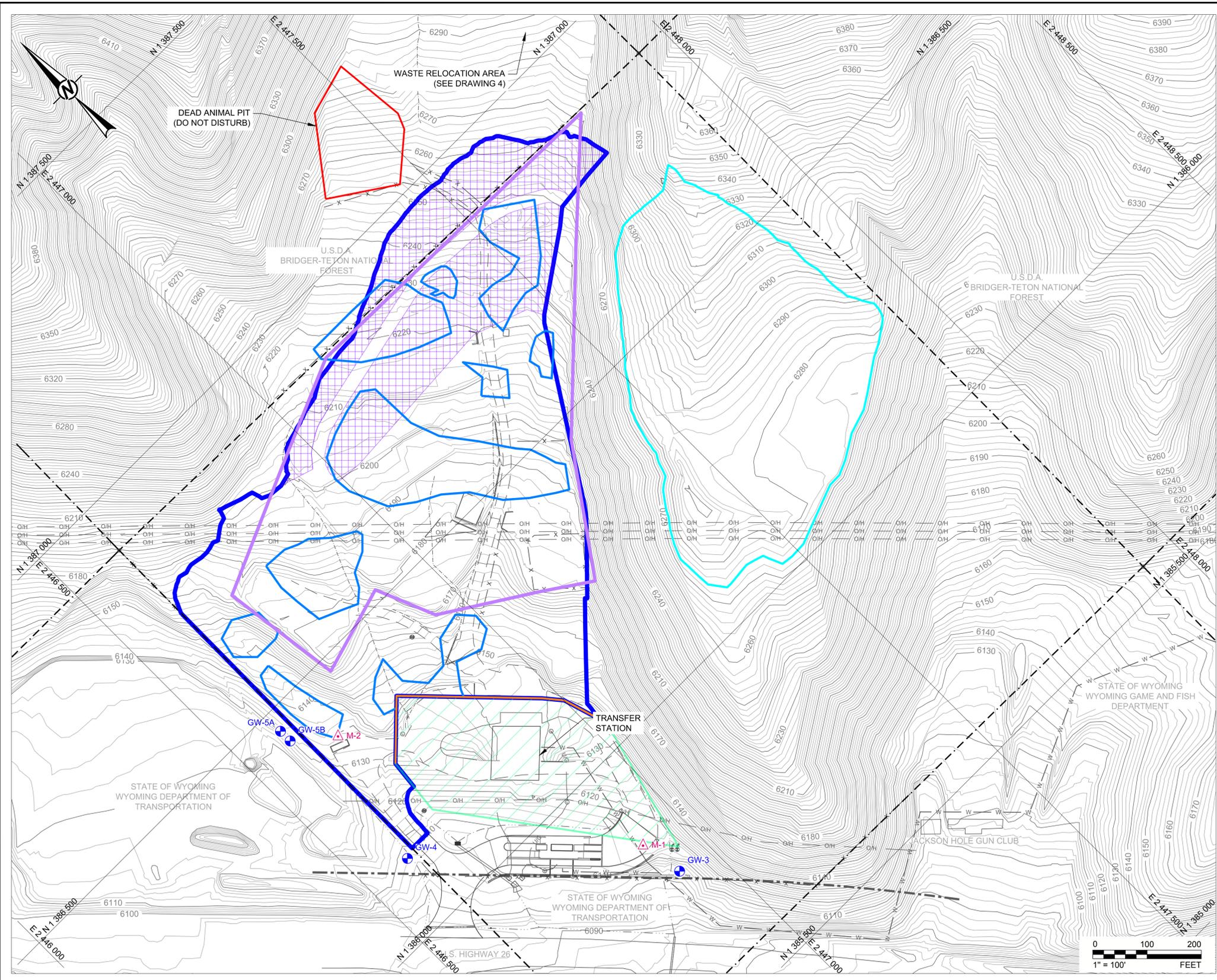


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TITLE
OVERALL SITE PLAN

PROJECT No.
12381604A

Rev. of DRAWING
B of 2



LEGEND

- 6240 — EXISTING GROUND TOPOGRAPHY (REF 2.)
- - - - - PROPERTY BOUNDARY
- X — EXISTING FENCE
- W — EXISTING WATER LINE
- O/H — EXISTING OVERHEAD POWER LINE
- U/G — EXISTING UNDERGROUND POWER LINE
- - - - - EXISTING RIGHT-OF-WAY
- — — — — WASTE MANAGEMENT, DIVERSION, AND COMPOSTING ACTIVE OPERATING AREA
- — — — — MAXIMUM LIMIT OF WASTE EXCAVATION
- GW-3 EXISTING GROUNDWATER WELL
- ▲ M-1 EXISTING METHANE MONITORING WELL
- — — — — CLEAN BORROW SOURCE AREA
- — — — — LIMITS OF EARTHWORK FOR FINAL DEVELOPMENT GRADES
- — — — — PERMANENT 4H:1V EXCAVATION SLOPE (SEE NOTE 3)
- — — — — DEAD ANIMAL PIT (DO NOT DISTURB)
- — — — — NOT IN CONTRACT
- — — — — AREA OF PROBABLE WASTE (SEE NOTES 1 AND 2)

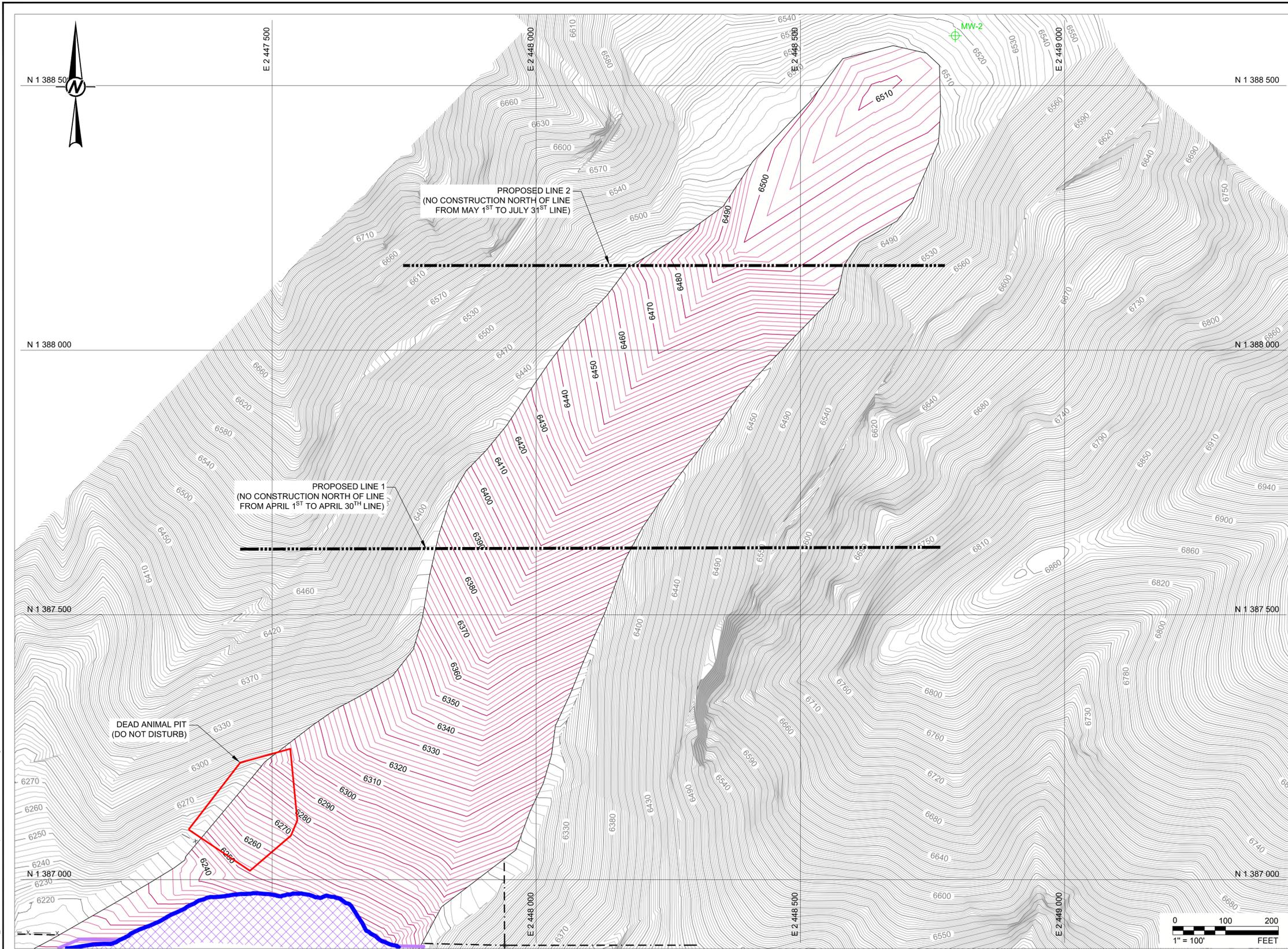
- REFERENCES**
- SITE LOCATION: WITHIN SECTIONS 22 AND 28, T40N, R116W, TETON COUNTY, WYOMING.
 - EXISTING GROUND TOPOGRAPHY PROVIDED BY ECS ENGINEERS, LLC. TOPOGRAPHY IS A COMPOSITE OF THE TRANSFER STATION SURVEY PROVIDED BY TETON COUNTY ON MARCH 19, 2012, A SURVEY CONDUCTED BY ECS ENGINEERS, LLC ON MAY 2012, AND PHASE I TRANSFER STATION DESIGN FROM GORDON ENVIRONMENTAL, INC., MARCH 24, 2015.
 - THE COORDINATE SYSTEM IS WGS, VERTICAL DATUM NGVD-29.4.

- NOTES**
- AREAS OF PROBABLE WASTE WERE IDENTIFIED THROUGH GEOPHYSICAL SURVEY OF ACCESSIBLE AREAS OF THE SITE ON NOVEMBER 4 AND 5, 2015. GEOPHYSICAL METHODS ARE BASED ON MATERIAL CONDUCTIVITY AND CHARGEABILITY AND MAY NOT DETECT ALL SUBSURFACE FEATURES OF CONCERN. CONSIDERING THESE LIMITATIONS, ENGINEER CANNOT DEFINITELY CONCLUDE THAT THE AREAS IDENTIFIED ARE REPRESENTATIVE OR COMPREHENSIVE OF BURIED MATERIAL ON-SITE. AREAS OF PROBABLE WASTE ARE PROVIDED TO SERVE ONLY AS A STARTING POINT FOR WASTE EXCAVATION(S).
 - WASTE EXCAVATIONS SHALL EXTEND TO FINAL DESIGN GRADE AS SHOWN IN DRAWING 4, OR MAXIMUM DEPTH OF OBSERVED WASTE, WHICHEVER IS GREATER. WASTE EXCAVATIONS ADVANCED BEYOND FINAL DESIGN GRADE SHALL BE BACKFILLED WITH CLEAN FILL MATERIAL IN ACCORDANCE WITH SECTION 31 23 00.
 - WASTE EXCAVATIONS WITHIN THE PERMANENT 4H:1V SLOPE SHALL ONLY EXTEND TO THE FINAL DESIGN GRADES AS SHOWN IN DRAWING 5.
 - TEMPORARY WASTE EXCAVATION SLOPES SHALL NOT EXCEED 2H:1V AT ANY TIME, UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE.
 - WASTE EXCAVATIONS SHALL NOT EXTEND BEYOND THE MAXIMUM LIMITS OF WASTE EXCAVATION SHOWN. WASTE DOWN-CANYON OF THE TRANSFER STATION WAS REMOVED AS PART OF SCALE HOUSE CONSTRUCTION IN 2015.
 - CONTRACTOR SHALL CONDUCT WASTE EXCAVATION AND SITE GRADING/RESTORATION IN PHASES AS SHOWN SO AS TO NOT INTERFERE WITH EXISTING SITE OPERATIONS. EXCAVATION PHASES SHALL BE APPROVED BY OWNER AND CONSTRUCTION MANAGER PRIOR TO MOVING TO SUBSEQUENT PHASES, AND SITE GRADING/RESTORATION SHALL BE SUFFICIENT TO ALLOW OWNER OCCUPATION OF COMPLETED PHASES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, CONSTRUCTION, AND MAINTENANCE OF TEMPORARY ACCESS ROAD TO CLEAN BORROW SOURCE, IF NECESSARY.

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<p>SEAL</p>	<p>CLIENT TETON COUNTY JACKSON, WYOMING</p>	<p>PROJECT TETON COUNTY TRANSFER STATION WASTE RELOCATION AND EARTHWORKS BID PACKAGE</p>	<p>TITLE WASTE EXCAVATION PLAN</p>																					
<table border="0" style="width: 100%;"> <tr> <td style="width: 25%;">B</td> <td style="width: 25%;">2016-03-14</td> <td style="width: 25%;">ISSUED FOR BID</td> <td style="width: 25%;">DKW</td> <td>DKW</td> <td>JAR</td> <td>MEM</td> </tr> <tr> <td>A</td> <td>2016-02-19</td> <td>ISSUED FOR CLIENT REVIEW</td> <td>DKW</td> <td>DKW</td> <td>JAR</td> <td>MEM</td> </tr> <tr> <td>Rev.</td> <td>YYYY-MM-DD</td> <td>DESCRIPTION</td> <td>PREPARED</td> <td>DESIGN</td> <td>REVIEW</td> <td>APPROVED</td> </tr> </table>	B	2016-03-14	ISSUED FOR BID	DKW	DKW	JAR	MEM	A	2016-02-19	ISSUED FOR CLIENT REVIEW	DKW	DKW	JAR	MEM	Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED	<p>CONSULTANT</p> <p>GOLDER ASSOCIATES INC. 44 UNION BLVD, SUITE 300 LAKEWOOD, COLORADO USA [+1] (303) 980 0540 www.golder.com</p>	<p>PROJECT No. 12381604A</p>	<p>Rev. of DRAWING B of 3</p>
B	2016-03-14	ISSUED FOR BID	DKW	DKW	JAR	MEM																		
A	2016-02-19	ISSUED FOR CLIENT REVIEW	DKW	DKW	JAR	MEM																		
Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED																		

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANS D



LEGEND

- 6240 EXISTING GROUND TOPOGRAPHY (REF 2.)
- 6240 FINAL COVER GRADING (SEE NOTES 1-4)
- PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND POWER LINE
- EXISTING RIGHT-OF-WAY
- WASTE MANAGEMENT, DIVERSION, AND COMPOSTING ACTIVE OPERATING AREA
- LIMIT OF WASTE EXCAVATION
- DEAD ANIMAL PIT (DO NOT DISTURB)
- LIMITS OF FINAL DEVELOPMENT EARTHWORK
- PERMANENT 4H:1V EXCAVATION SLOPE
- EXISTING GROUNDWATER WELL
- EXISTING MONITORING WELL (DRY)

- REFERENCES**
1. SITE LOCATION: WITHIN SECTIONS 22 AND 28, T40N, R116W, TETON COUNTY, WYOMING.
 2. EXISTING GROUND TOPOGRAPHY PROVIDED BY ECS ENGINEERS, LLC. TOPOGRAPHY IS A COMPOSITE OF THE TRANSFER STATION SURVEY PROVIDED BY TETON COUNTY ON MARCH 19, 2012, A SURVEY CONDUCTED BY ECS ENGINEERS, LLC ON MAY 2012, AND PHASE I TRANSFER STATION DESIGN FROM GORDON ENVIRONMENTAL, INC., MARCH 24, 2015.
 3. THE COORDINATE SYSTEM IS WGS, VERTICAL DATUM NGVD-29.4.

- NOTES**
1. RELOCATED WASTE INCLUSIVE OF COVER MATERIAL SHALL NOT EXCEED THE DESIGN GRADES AS SHOWN.
 2. ALL WASTE RELOCATION WORK (INCLUDING EQUIPMENT OPERATION AND HAUL TRAFFIC) SHALL BE IN ACCORDANCE WITH USFS SEASONAL CONSTRUCTION RESTRICTIONS AS SHOWN.
 3. ALL RELOCATED WASTE PLACED EACH DAY SHALL BE COVERED WITH A MINIMUM OF SIX INCHES OF CLEAN GENERAL FILL MATERIAL. LOCATIONS OF WASTE RELOCATION SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF CLEAN GENERAL FILL AT THE CONCLUSION OF THE WORK.
 4. THE EXTENT OF DEVELOPMENT OF THESE DESIGN GRADES WILL DEPEND ON ACTUAL WASTE RELOCATION QUANTITIES. IF WASTE VOLUME IS ANTICIPATED TO EXCEED DESIGN GRADES, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
 5. TOPSOIL AND EXISTING SOIL COVER MATERIALS WITHIN WASTE RELOCATION AREA TO BE STRIPPED, STOCKPILED, AND REPLACED WHERE POSSIBLE.

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B	2016-03-14	ISSUED FOR BID	DKW	DKW	JAR	MEM
A	2016-02-19	ISSUED FOR CLIENT REVIEW	DKW	DKW	JAR	MEM
Rev.	YYYY-MM-DD	DESCRIPTION	PREPARED	DESIGN	REVIEW	APPROVED

SEAL

CLIENT
TETON COUNTY
JACKSON, WYOMING

CONSULTANT

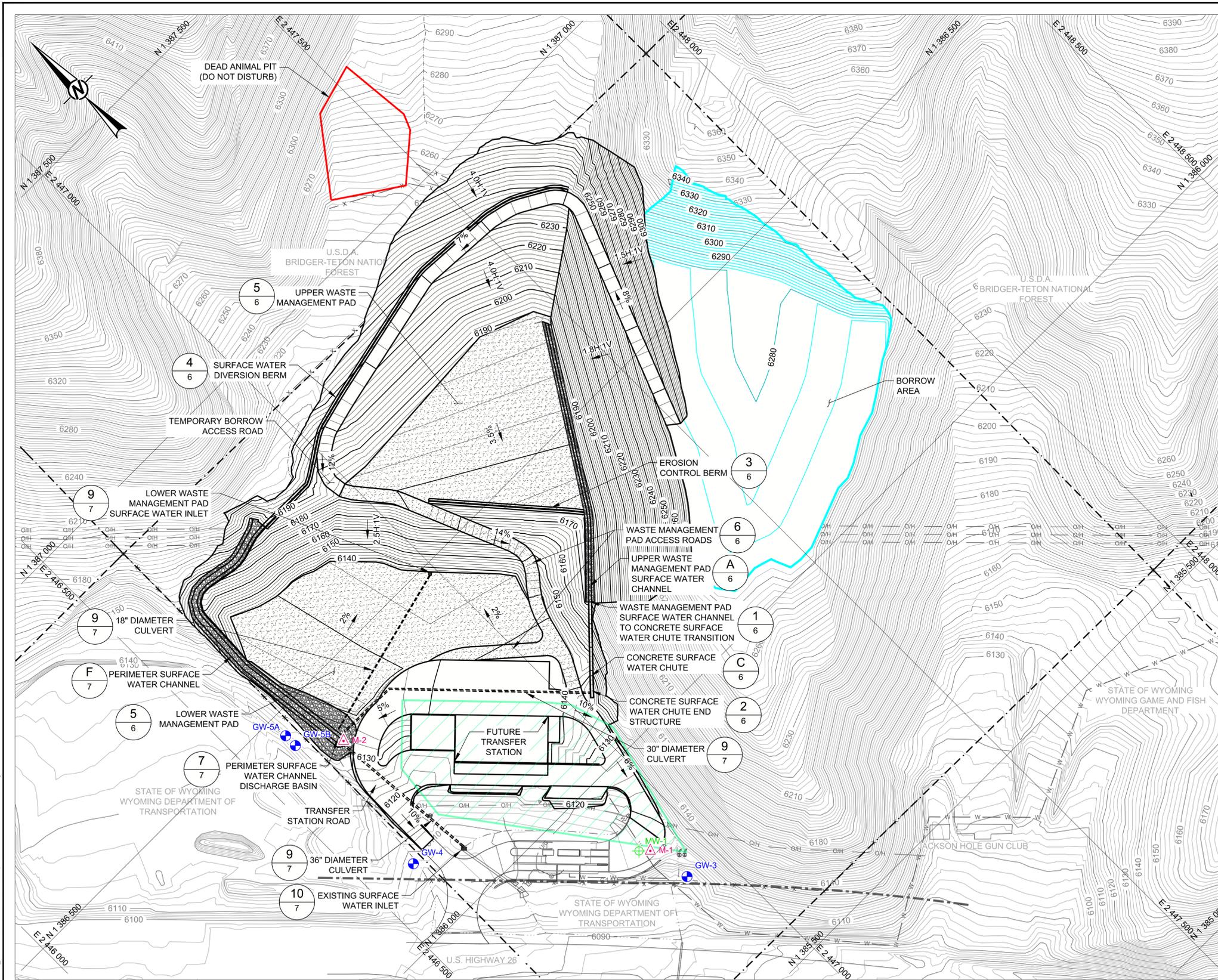
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PROJECT
TETON COUNTY TRANSFER STATION
WASTE RELOCATION AND EARTHWORKS BID PACKAGE

TITLE
WASTE RELOCATION PLAN

PROJECT No. 12381604A Rev. B of DRAWING 4



LEGEND

	EXISTING GROUND TOPOGRAPHY (REF 2.)
	FINAL GRADING (SEE NOTE 1)
	PROPOSED BORROW AREA GROUND TOPOGRAPHY
	PROPERTY BOUNDARY
	EXISTING FENCE
	EXISTING WATER LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING UNDERGROUND POWER LINE
	EXISTING RIGHT-OF-WAY
	EXISTING GROUNDWATER WELL
	EXISTING MONITORING WELL (DRY)
	EXISTING METHANE MONITORING WELL
	METHANE MONITORING WELL
	PROPOSED CULVERT
	PROPOSED FINAL ROAD SURFACING
	PROPOSED RIPRAP
	LIMITS OF BORROW SOURCE AREA
	DEAD ANIMAL PIT (DO NOT DISTURB)
	NOT IN CONTRACT

NOTE(S)
 1. GRADING SURFACE REFLECTS GRADES PRIOR TO SURFACING OR TOPSOIL PLACEMENT.

- REFERENCE(S)**
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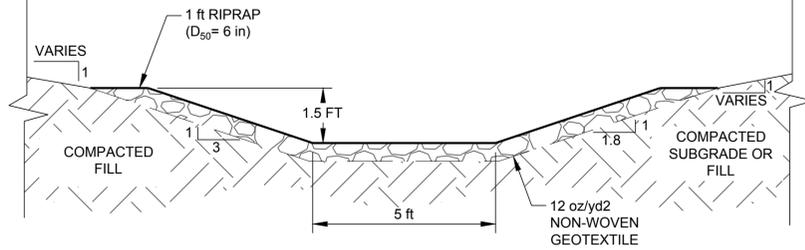


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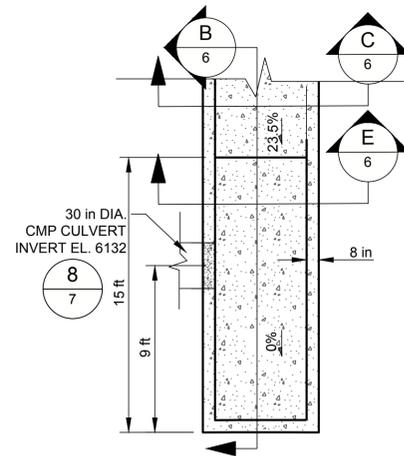
<p>SEAL</p> <p>CLIENT TETON COUNTY JACKSON, WYOMING</p> <p>CONSULTANT</p> <p></p> <p>GOLDER ASSOCIATES INC. 44 UNION BLVD, SUITE 300 LAKEWOOD, COLORADO USA [+1] (303) 980 0540 www.golder.com</p>	<p>PROJECT TETON COUNTY TRANSFER STATION WASTE RELOCATION AND EARTHWORKS BID PACKAGE</p> <p>TITLE GRADING PLAN</p> <p>PROJECT No. 123-81604A</p>	<p>Rev. of DRAWING B of 5</p>
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<p>B 2016-03-14 ISSUED FOR BID</p> <p>A 2016-02-19 ISSUED FOR CLIENT REVIEW</p> <p>Rev. YYYY-MM-DD DESCRIPTION</p>	<p>DKW DKW JAR MEM</p> <p>DKW DKW JAR MEM</p> <p>PREPARED DESIGN REVIEW APPROVED</p>	
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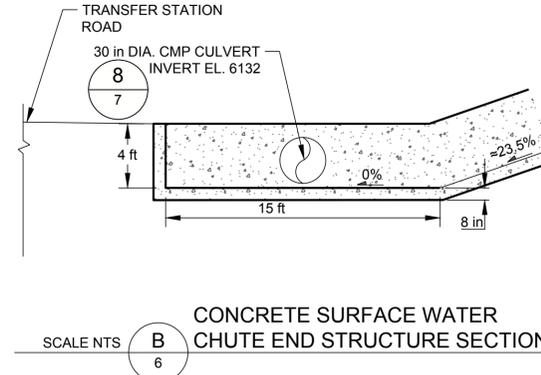
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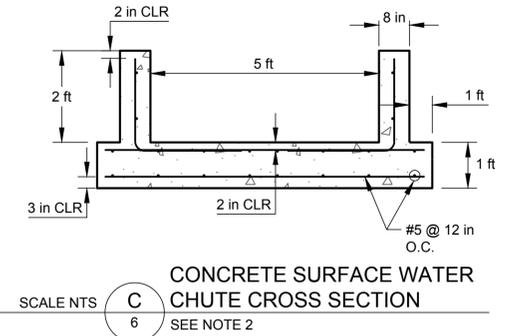
WASTE MANAGEMENT PAD SURFACE WATER CHANNEL CROSS SECTION
SCALE NTS **A**
6



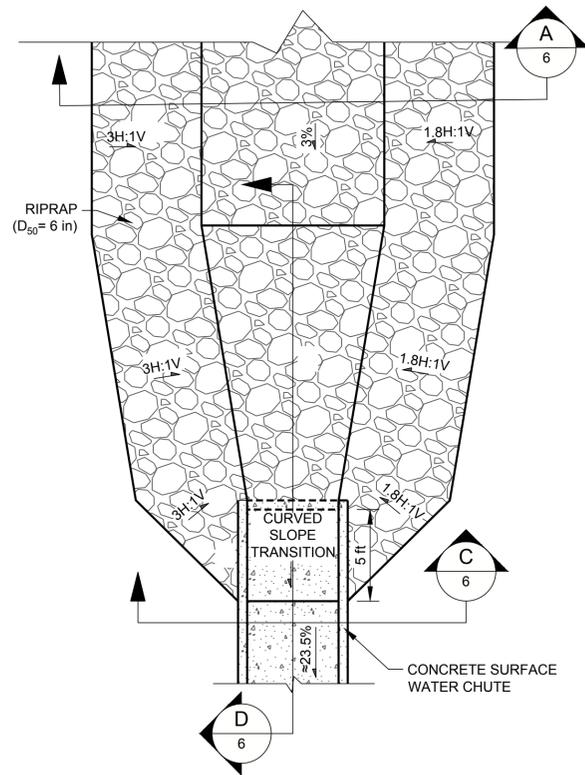
CONCRETE SURFACE WATER CHUTE END STRUCTURE PLAN
SCALE NTS **2**
6



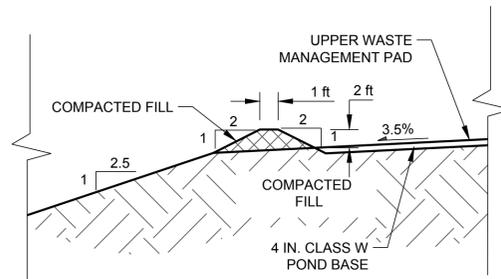
CONCRETE SURFACE WATER CHUTE END STRUCTURE SECTION
SCALE NTS **B**
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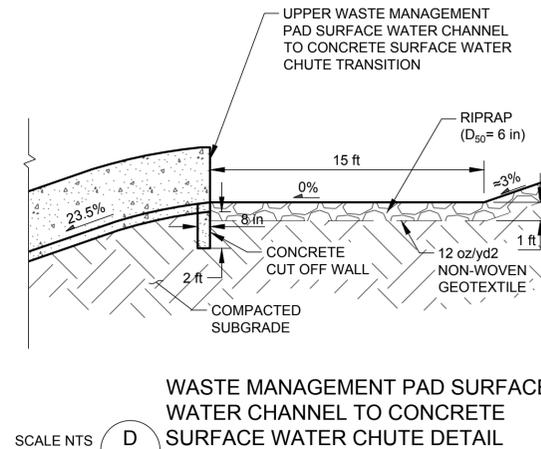
CONCRETE SURFACE WATER CHUTE CROSS SECTION
SCALE NTS **C**
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SEE NOTE 2



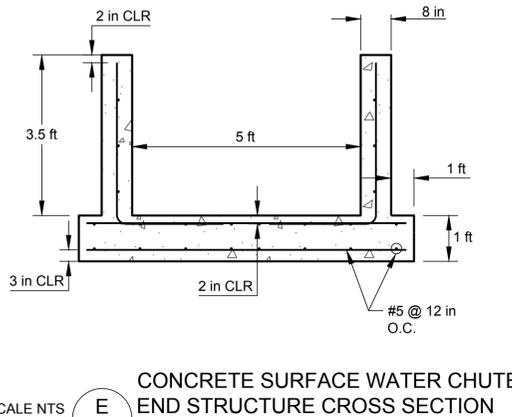
UPPER WASTE MANAGEMENT PAD SURFACE WATER CHANNEL TO CONCRETE SURFACE WATER CHUTE TRANSITION PLAN
SCALE NTS **1**
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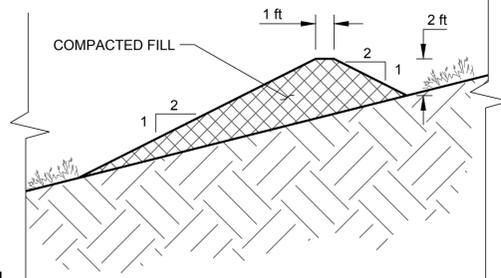
EROSION CONTROL BERM DETAIL
SCALE NTS **3**
6



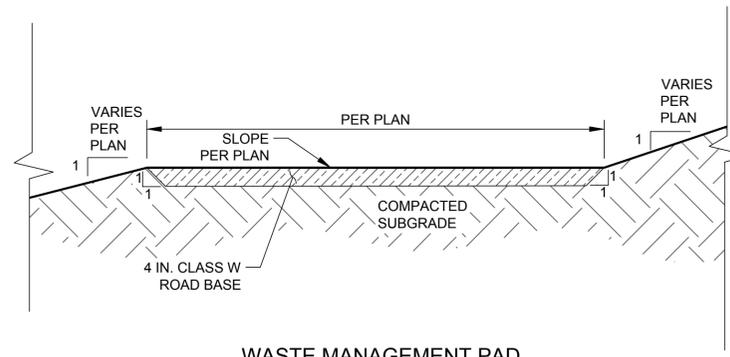
WASTE MANAGEMENT PAD SURFACE WATER CHANNEL TO CONCRETE SURFACE WATER CHUTE DETAIL
SCALE NTS **D**
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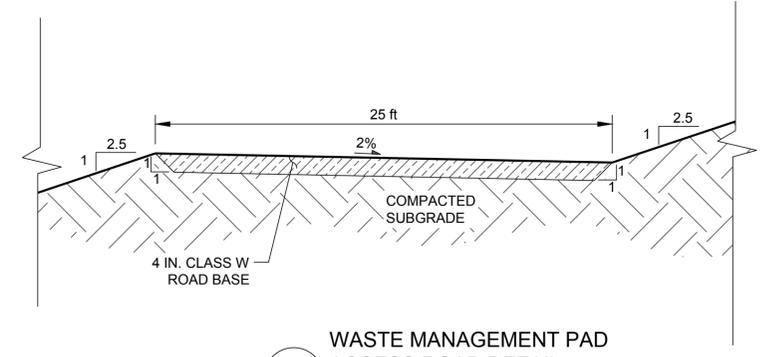
CONCRETE SURFACE WATER CHUTE END STRUCTURE CROSS SECTION
SCALE NTS **E**
6



SURFACE WATER DIVERSION BERM DETAIL
SCALE NTS **4**
6



WASTE MANAGEMENT PAD SURFACING DETAIL
SCALE NTS **5**
6
SEE NOTE 1



WASTE MANAGEMENT PAD ACCESS ROAD DETAIL
SCALE NTS **6**
6
SEE NOTE 1

NOTE(S)

- ROAD BASE SHOULD MEET WYOMING DEPARTMENT OF TRANSPORTATION CLASS W GRADATION REQUIREMENTS FOR ROAD BASES AND SUBBASES.
- ADD HORIZONTAL JOINTS EVERY 24 FEET WITH WATER STOP.

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JACKSON, WYOMING

CONSULTANT



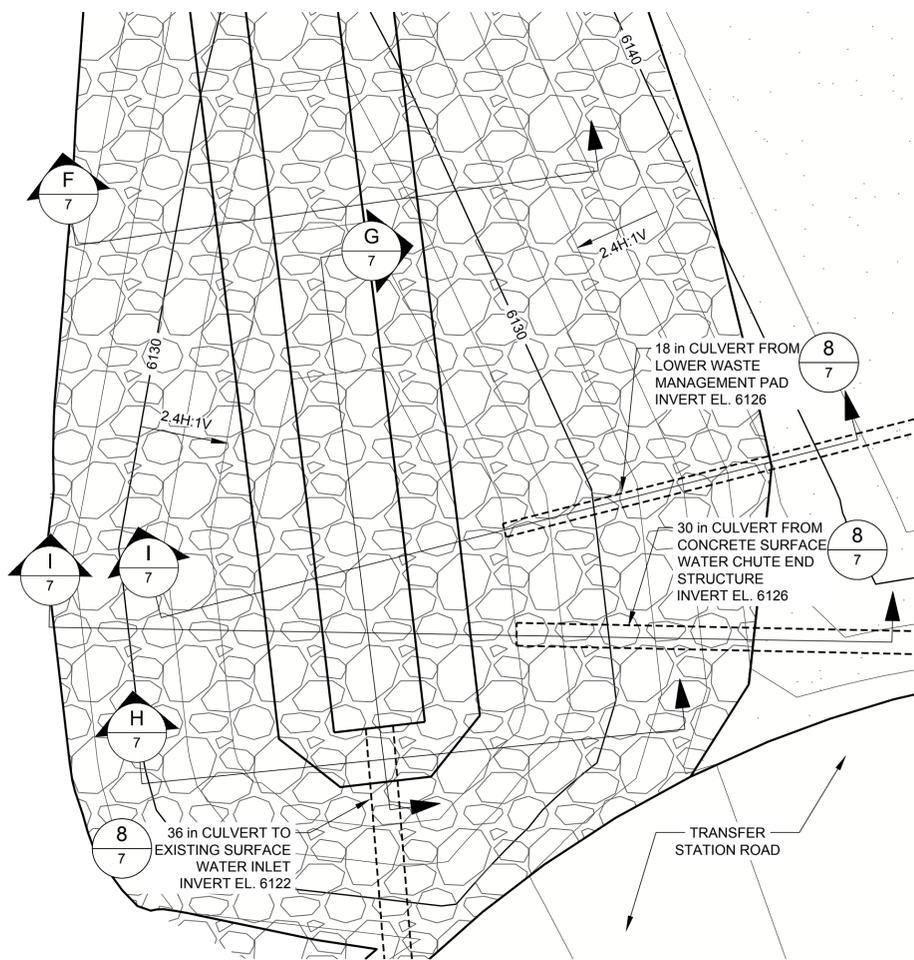
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WASTE RELOCATION AND EARTHWORKS BID PACKAGE

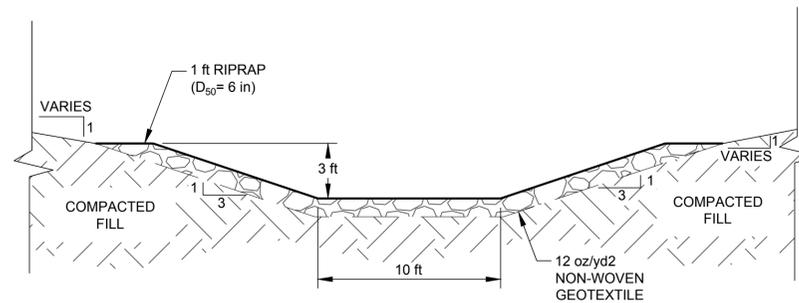
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DETAILS SHEET 1 OF 2

PROJECT No. 12381604A Rev. of DRAWING B of 6

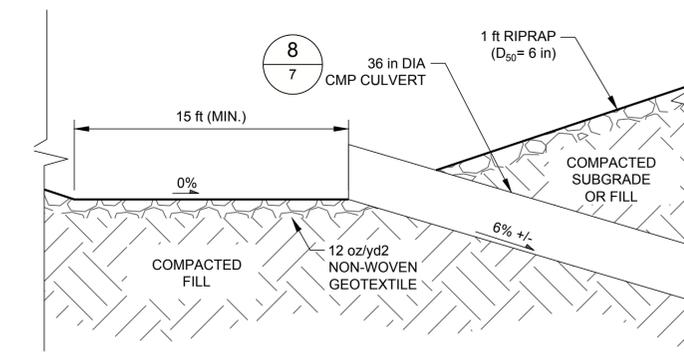
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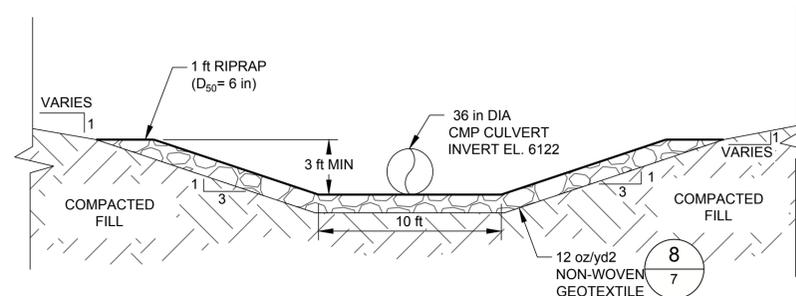
SCALE NTS $\frac{7}{7}$ PERIMETER SURFACE WATER CHANNEL DISCHARGE BASIN PLAN



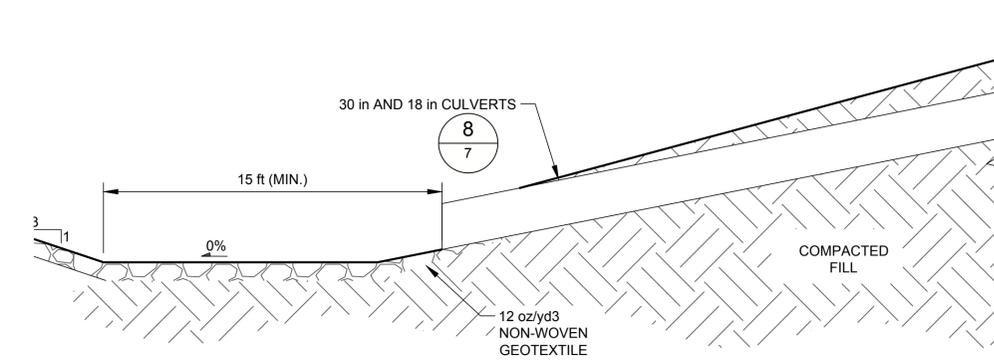
SCALE NTS $\frac{F}{7}$ PERIMETER SURFACE WATER CHANNEL CROSS SECTION



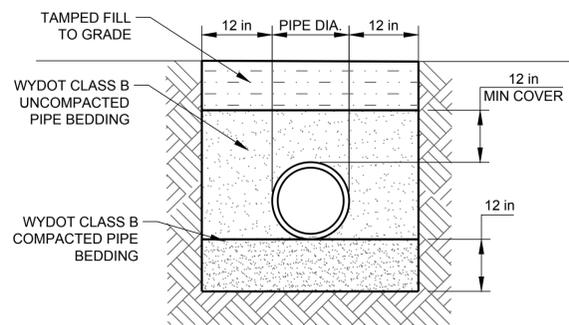
SCALE NTS $\frac{G}{7}$ PERIMETER SURFACE WATER CHANNEL DISCHARGE BASIN TO DISCHARGE CULVERT SECTION



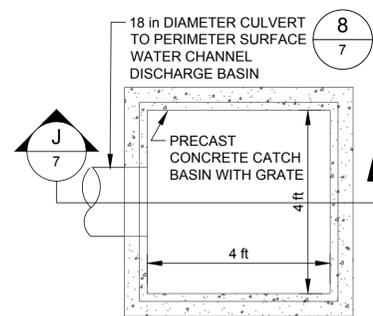
SCALE NTS $\frac{H}{7}$ DISCHARGE BASIN TO DISCHARGE CULVERT CROSS SECTION



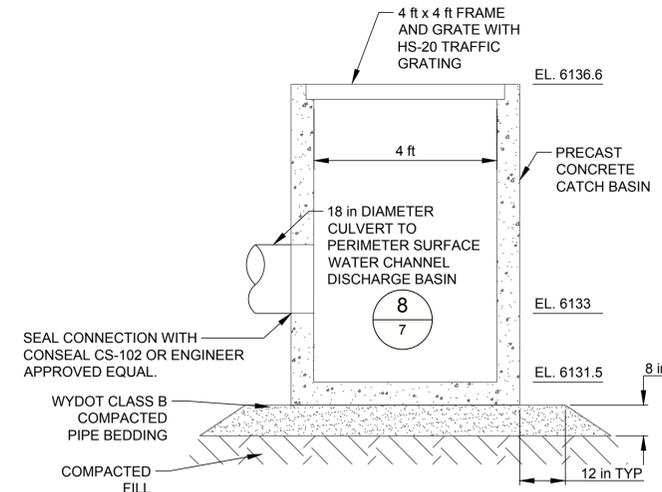
SCALE NTS $\frac{I}{7}$ CULVERT DISCHARGE INTO PERIMETER SURFACE WATER CHANNEL DISCHARGE BASIN DETAIL



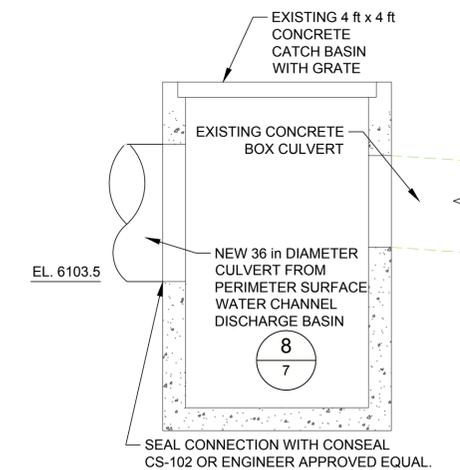
SCALE NTS $\frac{8}{7}$ PIPE BEDDING DETAIL



SCALE NTS $\frac{9}{7}$ UPPER WASTE MANAGEMENT PAD SURFACE WATER INLET PLAN



SCALE NTS $\frac{J}{7}$ LOWER WASTE MANAGEMENT PAD SURFACE WATER INLET CROSS SECTION



SCALE NTS $\frac{10}{7}$ CULVERT TIE-IN TO EXISTING SURFACE WATER INLET DETAIL

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PROJECT
TETON COUNTY TRANSFER STATION
WASTE RELOCATION AND EARTHWORKS BID PACKAGE

TITLE
DETAILS SHEET 2 OF 2

PROJECT No.
12381604A

Rev. of DRAWING
B of 7

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